

GENERAL CATALOGUE
GESAMTKATALOG

1	MICRO SURGICAL INSTRUMENTS	MIKRO-CHIRURGISCHE INSTRUMENTE
2	SPREADING AND RETRACTING INSTRUMENTS	INSTRUMENTE ZUM SPREIZEN UND HALTEN
3	SCISSORS	SCHEREN
4	FORCEPS, CLAMPS AND CLIPS	PINZETTEN, KLEMMEN UND CLIPS
5	NEEDLE HOLDERS	NADELHALTER
6	PUNCHES, RONGEURS, BONE CUTTERS	STANZEN, RONGEURE, KNOCHENSCHNEIDER
7	CHISELS, CURETTES, RASPATORIES, TAMPERS, DISSECTORS	MEISSEL, SCHARFE LÖFFEL, RASPATORIEN, STÖSSEL, DISSEKTOREN
8	SUCTION INSTRUMENTS	SAUGINSTRUMENTE
9		
10	MICRO DISSECTION AND RETRACTING INSTRUMENTS	MIKRO DISSEKTIONS- UND HALTEINSTRUMENTE
11	THORACIC, CARDIAC AND VASCULAR INSTRUMENTS SET FOR PEDIATRIC CARDIAC SURGERY	THORAX-, HERZ- U. GEFÄSSCHIRURGISCHE INSTRUMENTE SET FÜR KINDERHERZCHIRURGIE
12		
13		
14		
15	SPINAL IMPLANTS FENESTRA CERVICAL DISC REPLACEMENT FORMAR CERVICAL DISC REPLACEMENT	WIRBELSÄULENIMPLANTATE FENESTRA HWS-BANDSCHEIBENERSATZ FORMAR HWS-BANDSCHEIBENERSATZ
16		
17	GENERAL USER INFORMATION	ALLGEMEINE ANWENDERINFORMATION
18		
19	NUMERICAL INDEX	INDEX NUMERISCH
20		

FEHLING...

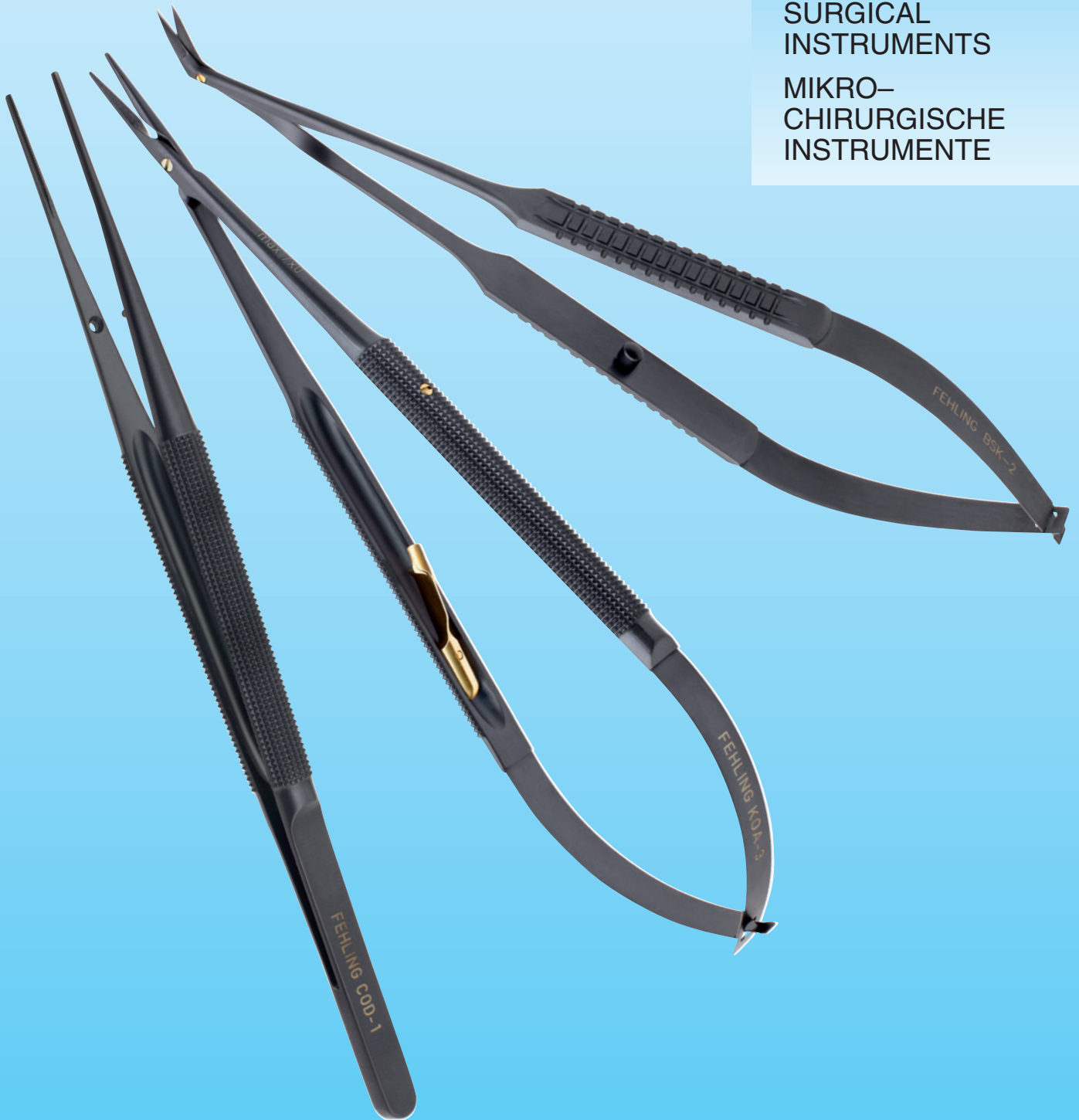
... THE DIFFERENCE

1

CERAMO®

MICRO
SURGICAL
INSTRUMENTS

MIKRO-
CHIRURGISCHE
INSTRUMENTE



FEHLING
INSTRUMENTS

Hanauer Landstr. 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49 (0) 61 88 - 9574.40



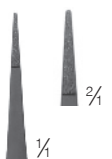
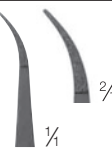
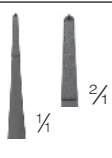
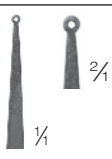





+49 (0) 61 88 - 9574.45



info@fehling-instruments.de

CERAMO® RONDO

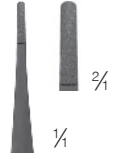

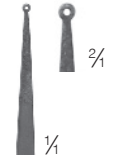
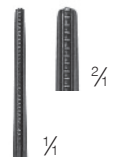


	JAW WIDTH MAUL BREITE	TOTAL LENGTH / GESAMTLÄNGE					
		120 mm	150 mm	180 mm	210 mm	230 mm	250 mm
 MICRO ROUGH MIKORAU	0,15 mm		COV-6				
	0,3 mm	COV-8	COV-2	COV-4			
	0,5 mm	COA-0	COA-3	COA-4	COA-5	COA-6	
	0,7 mm		COC-1	COC-2	COC-3	COC-4	
 MICRO ROUGH MIKORAU	0,15 mm		COV-5				
	0,3 mm	COV-7	COV-1	COV-3			
 MICRO ROUGH MIKORAU	0,5 mm	COE-0	COE-1	COE-2	COE-3	COE-4	
	0,35 mm		COS-1	COS-2	COS-3	COS-4	
 1 x 2 TEETH 1 x 2 ZÄHNE	0,7 mm		COX-1	COX-2	COX-3	COX-4	
	1,0 mm		COB-7	COB-1	COB-3	COB-5	COB-9
 MICRO ROUGH MIKORAU	2,0 mm		COF-7	COF-1	COF-3	COF-5	
	1,0 mm			COB-8	COB-2	COB-4	COB-6
 MICRO ROUGH MIKORAU	2,0 mm		COF-8	COF-2	COF-4	COF-6	
	1,0 mm			COA-7	COX-7		
 MICRO ROUGH MIKORAU	2,0 mm			COA-8	COX-8		
	1,2 mm		COD-0	COD-1	COD-2	COD-3	COF-0
	1,5 mm		COF-7	COD-4	COD-5	COD-6	
 NON-TRAUMATIC ATRAUMATISCH	1,8 mm			COE-5	COD-9	COE-7	
	1,2 mm			COE-9	COE-6	COE-8	
 NON-TRAUMATIC ATRAUMATISCH	1,2 mm			COE-0	COE-6	COE-8	
	1,2 mm			COC-6	COD-8		
 BOULITO VALVE KLAPPE	1,0 mm			COS-0			
	1,5 mm			COS-7	COS-8	COR-0	

TITANIUM
TITAN

CERAMO® PLANO



	JAW WIDTH MAUL BREITE	TOTAL LENGTH / GESAMTLÄNGE			
		150 mm	180 mm	210 mm	230 mm
 MICRO ROUGH MIKRORAU	1,0 mm	COG-6	COG-7	COG-8	COG-9
 1x2 TEETH 1x2 ZÄHNE	0,7 mm	COJ-4	COJ-5	COJ-6	COJ-7
 MICRO ROUGH MIKRORAU	1,0 mm	COH-0	COI-9 COJ-1	COJ-2	
 NON-TRAUMATIC ATRAUMATISCH	1,2 mm	COL-1 COL-5	COL-2 COL-6	COL-3 COL-7	COL-4 COL-8

 TITANIUM
TITAN

CERAMO® PLANO-S



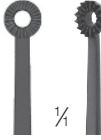
	JAW WIDTH MAUL BREITE	TOTAL LENGTH / GESAMTLÄNGE		
		200 mm	225 mm	240 mm
 MICRO ROUGH MIKRORAU	0,4 mm	COT-1 COU-1	COT-7 COU-7	COT-2 COU-2
	0,9 mm	COT-3 COU-3	COT-8 COU-8	COT-4 COU-4
 1x2 TEETH 1x2 ZÄHNE	1,0 mm	COT-5 COU-5	COT-9 COU-9	COT-6 COU-6
	1,0 mm		CPA-1 COU-0	CZE-1
 MICRO ROUGH MIKRORAU	2,0 mm		CPA-2 COT-0	CZE-2
	1,2 mm	COM-7	COM-5	COM-6
 NON-TRAUMATIC ATRAUMATISCH	2,0 mm		COM-8	



TITANIUM
TITAN

CERAMO® PLANO-S

TUMOR AND TISSUE GRASPING FORCEPS
TUMOR- UND GEWEBEFASSPINZETTEN











	JAW Ø MAUL Ø	TOTAL LENGTH GESAMTLÄNGE	
		220 mm	240 mm
 SPOONSHAPED LÖFFELFÖRMIG	2,0 mm	COG-0	
	3,0 mm	COG-1	COG-3
	5,0 mm	COG-2	COG-4
	7,0 mm		COG-5
 FLAT SERRATED FLACH GEZAHNT	3,0 mm	COP-1	CON-7
	5,0 mm	COP-3	CON-8
 SERRATED GEZAHNT	3,0 mm	COP-2	
	5,0 mm	COP-4	

	JAW Ø MAUL Ø	TOTAL LENGTH GESAMTLÄNGE
		230 mm
 SPOONSHAPED LÖFFELFÖRMIG	3,0 mm	CON-1
	4,0 mm	CON-3
	5,0 mm	CON-5
 SPOONSHAPED LÖFFELFÖRMIG	3,0 mm	CON-2
	4,0 mm	CON-4
	5,0 mm	CON-6

CERAMO® RONDO

GRASPING SURFACE: MICRO ROUGH
GREIFFLÄCHEN: MIKRORAU



		TOTAL LENGTH / GESAMTLÄNGE					
		120 mm	150 mm	180 mm	210 mm	230 mm	250 mm
 0,5 mm max. 9x0	WITH LOCK MIT SPERRE	KOY-1	KOD-5	KOD-9	KOE-9		
	WITHOUT LOCK OHNE SPERRE	KOY-2	KOD-6	KOE-0	KOF-0		
 0,5 mm max. 9x0	WITH LOCK MIT SPERRE	KOY-3	KOD-7	KOE-1			
	WITHOUT LOCK OHNE SPERRE	KOY-4	KOD-8	KOE-2	KOD-0		
 1,0 mm max. 7x0	WITH LOCK MIT SPERRE	KRA-1	KOB-1	KOB-3	KOB-5	KOB-7	KOA-0
	WITHOUT LOCK OHNE SPERRE		KOA-2	KOA-4	KOA-6	KOA-8	KOA-9
 1,0 mm max. 7x0	WITH LOCK MIT SPERRE	KOL-9	KOL-1	KOL-3	KOL-5	KOL-7	
	WITHOUT LOCK OHNE SPERRE	KOL-0	KOL-2	KOL-4	KOL-6	KOL-8	
 1,5 mm max. 6x0	WITH LOCK MIT SPERRE		KOT-8	KOT-5	KOT-6	KOT-7	KOS-9
	WITHOUT LOCK OHNE SPERRE		KOK-0	KOK-5	KOK-6	KOK-7	KOK-9
 1,5 mm max. 6x0	WITH LOCK MIT SPERRE		KRB-1	KOU-9	KOT-9	KOU-0	
	WITHOUT LOCK OHNE SPERRE		KOY-8	KOY-0	KOY-9	KOZ-0	
 2,0 mm max. 5x0	WITH LOCK MIT SPERRE		KOT-2	KOD-1	KOD-3	KOT-3	KOT-0
	WITHOUT LOCK OHNE SPERRE		KOX-9	KOD-2	KOD-4	KOT-4	
 2,0 mm max. 5x0	WITH LOCK MIT SPERRE		KOY-6	KOY-7	KOU-7	KOU-8	
	WITHOUT LOCK OHNE SPERRE		KOZ-7	KOZ-8	KOZ-6	KOZ-5	

max. suture size
max. Fadenstärke

TITANIUM
TITAN

CERAMO®

GRASPING SURFACE: MICRO ROUGH
GREIFFLÄCHEN: MIKRORAU



RONDO
STRONG MODEL, WITH LOCK
STARKES MODELL, MIT SPERRE



KOU-6



PLANO
STRONG MODEL, WITH LOCK
STARKES MODELL, MIT SPERRE
250 mm
KOW-0



190 mm	230 mm	250 mm	300 mm
KOV-9	KOU-4	KOU-5	KOU-3

max. suture size / max. Fadenstärke

CERAMO®







GRASPING SURFACE: MICRO ROUGH
GREIFFLÄCHEN: MIKRORAU



PLANO		TOTAL LENGTH / GESAMTLÄNGE			
		150 mm	180 mm	210 mm	230 mm
 1,0 mm $\frac{1}{4}$ max. 7x0	WITH LOCK MIT SPERRE	KOC-3 KOM-1	KOC-4 KOM-2	KOC-7 KOM-3	KOC-5 KOM-4
	WITHOUT LOCK OHNE SPERRE		KRB-0	KRA-9	
 2,0 mm $\frac{1}{4}$ max. 5x0	WITH LOCK MIT SPERRE	KOZ-1	KOZ-2	KOZ-3	KOZ-4
	WITHOUT LOCK OHNE SPERRE		KRA-7		KRA-8

max. suture size
max. Fadenstärke

TITANIUM
TITAN

PLANO-S	TOTAL LENGTH / GESAMTLÄNGE		
	200 mm	225 mm	240 mm
 0,4 mm $\frac{1}{4}$ max. 9x0	KOV-2	KOV-4	KOV-6
 0,4 mm $\frac{1}{4}$ max. 9x0	KOV-1	KOV-3	KOV-5
 1,0 mm $\frac{1}{4}$ max. 7x0	KON-1	KOM-5	KON-2
	KON-3	KOM-6	KON-4
 1,0 mm $\frac{1}{4}$ max. 7x0	KOM-8	KOM-7	KON-5
 2,0 mm $\frac{1}{4}$ max. 5x0		KOM-0	KOV-7
 2,0 mm $\frac{1}{4}$ max. 5x0		KRA-0	

max. suture size
max. Fadenstärke

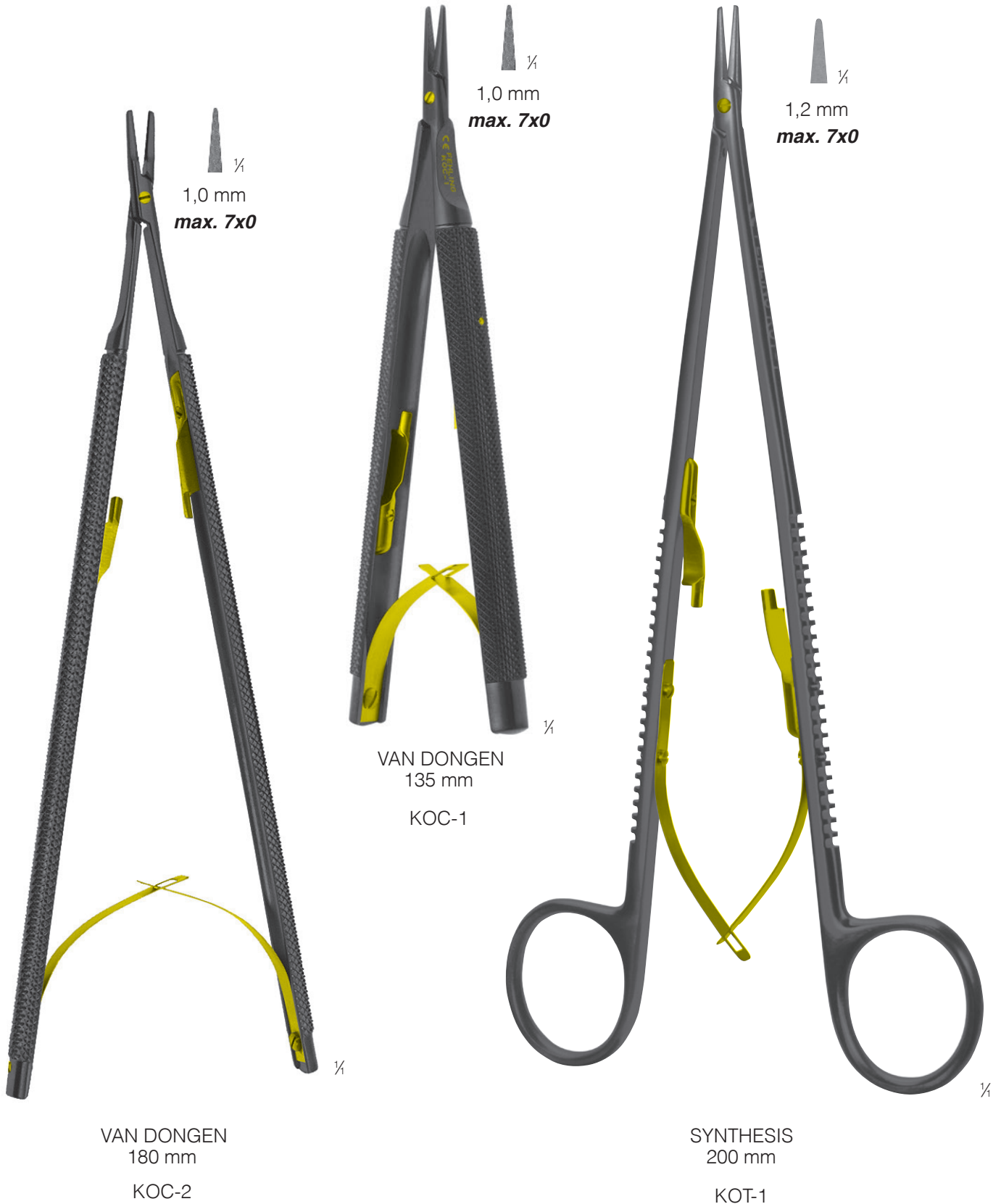
TITANIUM
TITAN

all PLANO-S patterns
also available with lock

alle PLANO-S Modelle
auch mit Sperre erhältlich

CERAMO®








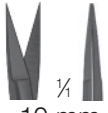

GRASPING SURFACE: MICRO ROUGH
GREIFFLÄCHEN: MIKRORAU



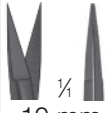






max. suture size / max. Fadenstärke

CERAMO®






RONDO		TOTAL LENGTH / GESAMTLÄNGE					
		120 mm	150 mm	180 mm	210 mm	230 mm	250 mm
 10 mm	POINTED SPITZ	BSL-2	BSN-5	BSN-3	BSJ-4		BSK-9
 10 mm	POINTED SPITZ	BSL-3	BSN-6	BSN-4			
 14 mm	POINTED SPITZ		BRK-2	BRK-4	BRK-6	BRK-8	
 14 mm	SERRATED GEZAHNT		BRL-2	BRL-4	BRL-6	BRL-8	
 14 mm	POINTED SPITZ		BRK-1	BRK-3	BRK-5	BRK-7	
 14 mm	SERRATED GEZAHNT		BRL-1	BRL-3	BRL-5	BRL-7	
 14 mm	BLUNT STUMPF		BSI-1	BSI-2	BSI-3	BSI-4	
 14 mm	POINTED SPITZ			BRS-3			
 14 mm	BLUNT STUMPF			BRS-4			



PLANO		TOTAL LENGTH / GESAMTLÄNGE					
		120 mm	150 mm	180 mm	210 mm	230 mm	250 mm
 10 mm	POINTED SPITZ	BRV-2	BRV-4	BRV-6			BSL-7
 10 mm	BLUNT STUMPF		BRV-7	BRV-8			
 10 mm	POINTED SPITZ	BRV-1	BRV-3	BRV-5			
 14 mm	POINTED SPITZ		BRC-2	BRC-4	BRC-6	BRC-8	
 14 mm	BLUNT STUMPF				BRD-0		
 14 mm	SERRATED GEZAHNT		BRE-4	BRE-2	BRE-6	BRE-8	
 14 mm	POINTED SPITZ		BRC-1	BRC-3	BRC-5	BRC-7	
 14 mm	SERRATED GEZAHNT		BRE-3	BRE-1	BRE-5	BRE-7	
 14 mm	POINTED SPITZ			BRS-1			
 14 mm	BLUNT STUMPF			BRS-2	BRC-0		

CERAMO® PLANO S

		TOTAL LENGTH / GESAMTLÄNGE					
		165 mm	185 mm	200 mm	225 mm	240 mm	250 mm
	STANDARD	BRF-8		BRD-8 BRD-4	BRD-6 BRD-2		BSN-2
	STRONG* STARK*			BRF-0	BRF-4		
	STANDARD	BRF-9		BRD-7 BRD-3	BRD-5 BRD-1		BSN-1
	STRONG* STARK*			BRF-3	BRF-5		
	FULL BLADE BLUNT VOLLES BLATT STUMPF	BSH-7		BSH-2	BSH-4	BSH-6	
	FULL BLADE BLUNT VOLLES BLATT STUMPF	BSH-8		BSH-1	BSH-3	BSH-5	

* SERRATED BLADES
* GEZAHNTE BLÄTTER

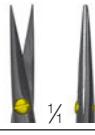

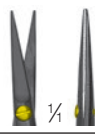

TITANIUM
TITAN

DELICATE SEHR FEIN	TOTAL LENGTH GESAMTLÄNGE 225 mm
	BRW-1
	BRW-2





CERAMO®



DELICATE SEHR FEIN		TOTAL LENGTH / GESAMTLÄNGE				
		165 mm	185 mm	200 mm	225 mm	240 mm
 1/4	POINTED SPITZ	BSA-0	BRZ-3	BRZ-5	BRZ-7	BRZ-9
 1/4	POINTED SPITZ	BRZ-0	BRZ-2	BRZ-4	BRZ-6	BRZ-8
 1/4	HALF-POINTED HALBSPITZ	BSA-8	BSZ-1	BSZ-3		
 1/4	HALF-POINTED HALBSPITZ	BSA-9	BRZ-1	BSZ-4		BSB-0





VANNAS

PLANO-S	TOTAL LENGTH GESAMTLÄNGE	
	200 mm	225 mm
 1/4	BSG-4	BSG-2 BSF-2
 1/4	BSG-3	BSG-1 BSF-1

 TITANIUM
TITAN






VANNAS

PLANO	TOTAL LENGTH GESAMTLÄNGE	
	150 mm	180 mm
 1/4	BSF-4	BSF-6
 1/4	BSF-3	BSF-5

CERAMO® RONDO

VASCULAR SCISSORS
GEFÄSS-SCHEREN







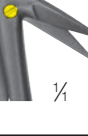



		TOTAL LENGTH GESAMT-LÄNGE	 7 mm	 10 mm
25°  ¼ BALLPOINTED MIT KNOFF	POINTED SPITZ	180 mm	BSP-1	BSM-1
		210 mm		BSI-5
		250 mm		BSL-4
	BALLPOINTED MIT KNOFF	180 mm		BSD-1
45°  ¼ BALLPOINTED MIT KNOFF	POINTED SPITZ	180 mm	BSP-2	BSM-2
		210 mm		BSI-6
		250 mm		BSL-6
	BALLPOINTED MIT KNOFF	180 mm		BSD-2
60°  ¼	POINTED SPITZ	180 mm	BSP-3	BSM-3
		210 mm		BSI-7
	BALLPOINTED MIT KNOFF	180 mm		BSD-3
90°  ¼	POINTED SPITZ	170 mm	BSP-4	BSM-4
		210 mm		BSI-8
	BALLPOINTED MIT KNOFF	170 mm		BSD-4
125°  ¼	POINTED SPITZ	170 mm	BSP-5	BSM-5
		210 mm		BSI-9
		250 mm		BSL-9
	BALLPOINTED MIT KNOFF	170 mm		BSD-5
140°  ¼	POINTED SPITZ	250 mm		BSL-0

CERAMO® PLANO

VASCULAR SCISSORS
GEFÄSS-SCHEREN










		TOTAL LENGTH GESAMT-LÄNGE	 7 mm	 10 mm
25° 	POINTED SPITZ	180 mm	BSM-6	BSK-1
		250 mm		BSK-6
	BALLPOINTED MIT KNOFF	180 mm		BRI-1
45° 	POINTED SPITZ	180 mm	BSM-7	BSK-2
		250 mm		BSK-7
	BALLPOINTED MIT KNOFF	180 mm		BRI-2
60° 	POINTED SPITZ	180 mm	BSM-8	BSK-3
		250 mm		BSN-0
	BALLPOINTED MIT KNOFF	180 mm		BRI-3
90° 	POINTED SPITZ	170 mm	BSM-0	BSK-4
		170 mm		BRI-4
	BALLPOINTED MIT KNOFF	170 mm		BRI-4
125° 	POINTED SPITZ	170 mm	BSM-9	BSK-5
		250 mm		BSK-8
	BALLPOINTED MIT KNOFF	170 mm		BRI-5
140° 	POINTED SPITZ	250 mm		BSL-8

CERAMO® PLANO

VASCULAR SCISSORS
GEFÄSS-SCHEREN



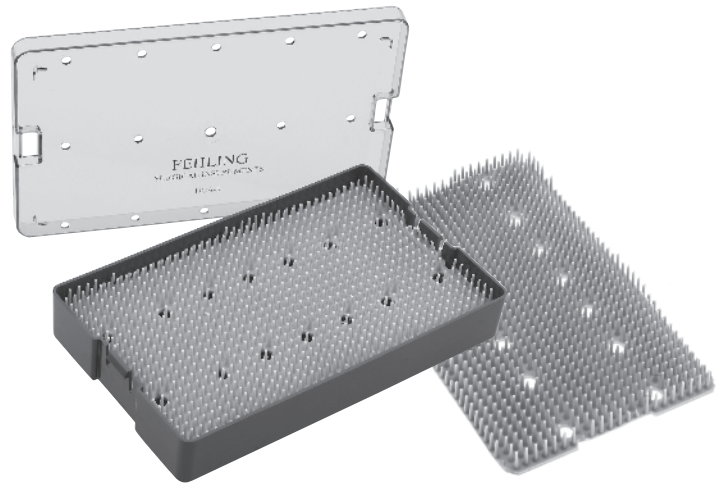
	 1/4 7 mm	 1/4 10 mm
25°  1/4	BRA-0	BRA-0L
45°  1/4	BRA-6	BRA-6L
60°  1/4	BRA-7	BRA-7L
90°  1/4	BRA-9	BRA-9L
125°  1/4	BRA-8	BRA-8L

PLASTIC CONTAINER WITH SILICONE MAT
KUNSTSTOFFCONTAINER MIT SILIKONMATTEN



FOR STRAIGHT INSTRUMENTS
FÜR GERADE INSTRUMENTE

250 x 150 x 20 mm	UCA-4
381 x 254 x 19 mm	UCA-1



FOR BAYONET-SHAPED INSTRUMENTS
FÜR BAJONETTFÖRMIGE INSTRUMENTE

250 x 150 x 43 mm	UCA-9
381 x 254 x 43 mm	UCA-8

Your Distributor
Ihr Vertriebspartner

Please note that not all products are available in every country.
Wir weisen darauf hin, dass einzelne Produkte oder Produktgruppen in manchen Ländern nicht verfügbar sein können.

The dimensions listed in the catalog are nominal measurements. Actual values may differ slightly due to variations in production.
Bei denen im Katalog angegebenen Maßen handelt es sich um Nennmaße. Die tatsächlichen Werte können fertigungsbedingt abweichen.

FEHLING...

... THE DIFFERENCE

2

SPREADING AND
RETRACTING
INSTRUMENTS

INSTRUMENTE
ZUM SPREIZEN
UND HALTEN



FEHLING
INSTRUMENTS

Hanauer Landstraße 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49 (0) 61 88 - 95 74.40

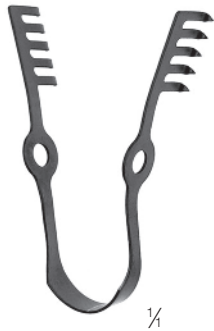


+49 (0) 61 88 - 95 74.45



info@fehling-instruments.de

CERAMO® SUPERFLEX



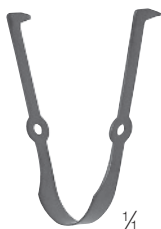
PRESSURE SPREIZDRUCK	
0,6 N	MNE-2
1,2 N	MNE-1



PRESSURE SPREIZDRUCK	
0,6 N	MNE-3



PRESSURE SPREIZDRUCK	
0,6 N	MNE-3V

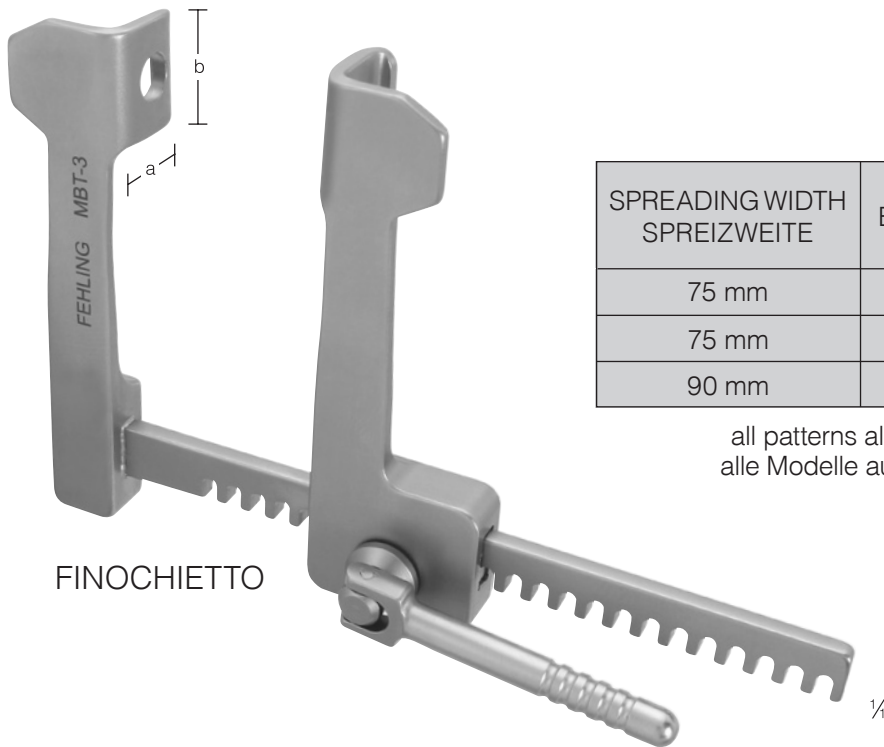


PRESSURE SPREIZDRUCK	
0,6 N	MNE-4

SUPERFLEX instruments are made of shape-memory metal. These instruments are super-elastic in normal O.R. temperatures. Their shape conforms to soft external pressure, yet the instruments regain their normal shape once the pressure is removed. No long-term alteration of shape is possible.

SUPERFLEX-Instrumente sind aus Metall mit Formgedächtnis. Sie sind bei normaler OP-Temperatur superelastisch. Ihre Form folgt jedem von außen kommenden Druck und sie gewinnen ihre ursprüngliche Form wieder, sobald der Druck entfällt. Ergebnis: Es wird keine bleibende Verformung verursacht.

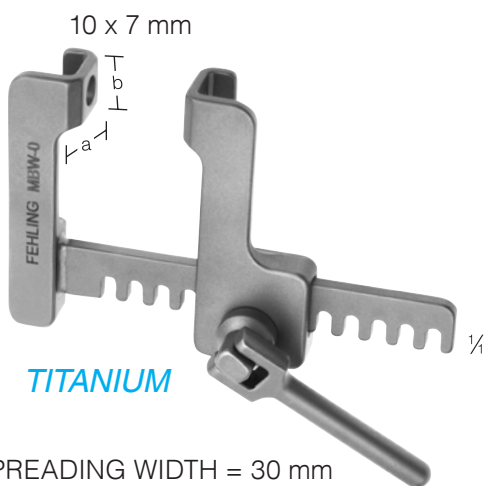
FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



FINOCHIETTO

SPREADING WIDTH SPREIZWEITE	BLADE SIZE BLATTGRÖSSE a x b	
75 mm	16 x 15 mm	MBT-3
75 mm	21 x 21 mm	MBT-4
90 mm	31,5 x 35 mm	MBT-5

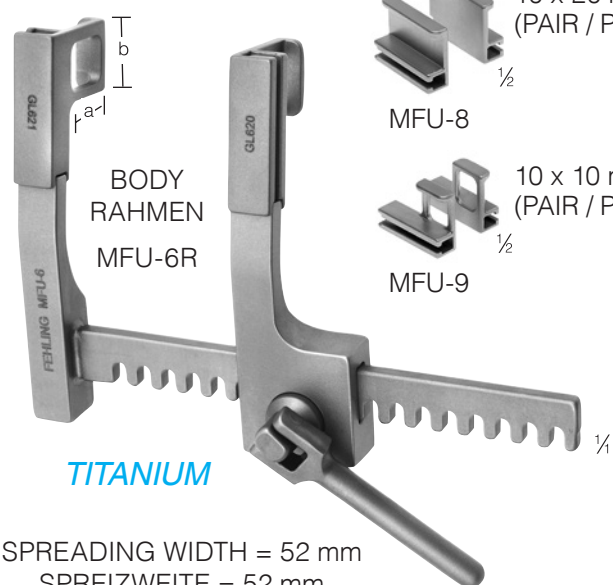
all patterns also available in CERAMO®
alle Modelle auch in CERAMO® erhältlich



TITANIUM

SPREADING WIDTH = 30 mm
SPREIZWEITE = 30 mm

MBW-0



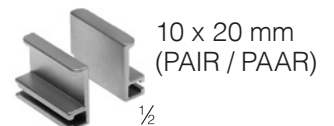
TITANIUM

SPREADING WIDTH = 52 mm
SPREIZWEITE = 52 mm

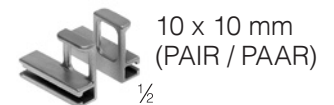
COMPLETE SET
KOMPLETTES SET

MFU-6

BLADES
BLÄTTER



MFU-8



MFU-9

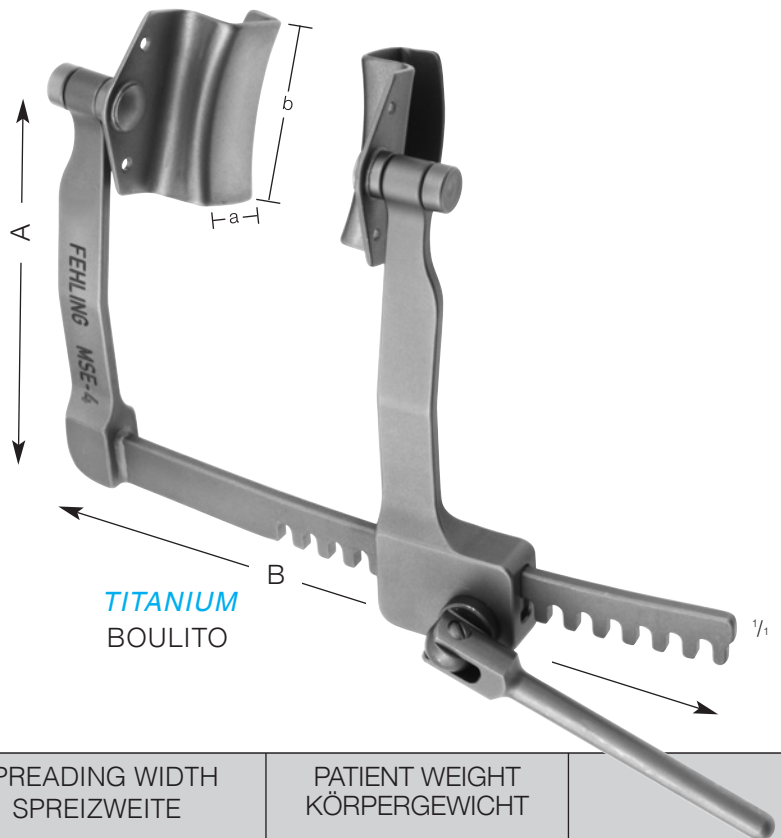
BODY
RAHMEN
MFU-6R

FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



MORSE

SPREADING WIDTH SPREIZWEITE	BLADE SIZE BLATTGRÖSSE a x b	
40 mm	14 x 12 mm	MSB-1
65 mm	14 x 12 mm	MSB-2
90 mm	20 x 15 mm	MSB-6
100 mm	23 x 20 mm	MSB-3
110 mm	20 x 15 mm	MSB-7
130 mm	23 x 20 mm	MSB-4
160 mm	23 x 20 mm	MSB-5



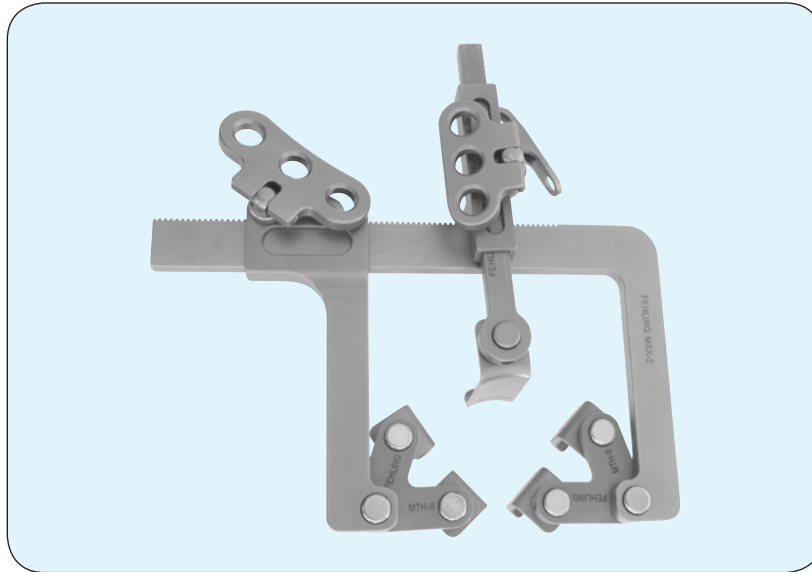
TITANIUM
BOULITO

BODY SIZE RAHMENGRÖSSE A / B	BLADE SIZE BLATTGRÖSSE a x b	SPREADING WIDTH SPREIZWEITE	PATIENT WEIGHT KÖRPERGEWICHT	
60 / 100 mm	12 x 25 mm	50 mm	≤ 5 kg	MSE-4
75 / 120 mm	18 x 35 mm	70 mm	5 – 15 kg	MSE-5
100 / 140 mm	21 x 55 mm	90 mm	15 – 30 kg	MSE-6
150 / 280 mm	30 x 100 mm	150 mm	30 – 60 kg	MSE-9*

* Stainless Steel / rostfreier Stahl

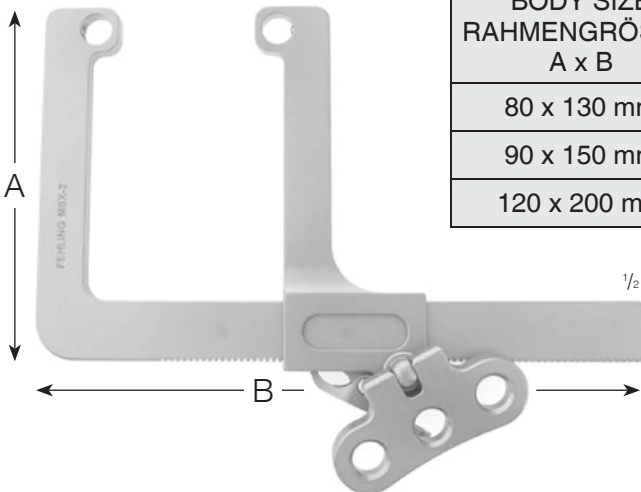
V-CUT
TITANIUM

FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



exemplary configuration
Konfigurationsbeispiel

RETRACTOR, BODY
SPERRER, RAHMEN



BODY SIZE RAHMENGRÖSSE A x B	PATIENT WEIGHT KÖRPERGEWICHT	SPREADING WIDTH SPREIZWEITE	
80 x 130 mm	3 – 7 kg	60 mm	MSX-1
90 x 150 mm	7 – 15 kg	85 mm	MSX-2
120 x 200 mm	15 – 40 kg	130 mm	MSX-3



BLADE GUIDE
HAKENFÜHRUNG

MSX-5A



STANDARD
MSX-5B

RIDER
SCHLITTEN



ANGLE ADJUSTABLE
WINKELVERSTELLBAR
MSX-5C

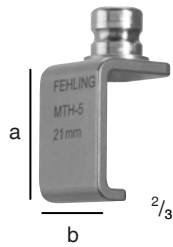


HORKE BLADE SWING
HORKE SCHAUKEL

HOLE DISTANCE LOCHABSTAND	
20 mm	MTH-2
25 mm	MTH-0
35 mm	MTH-1

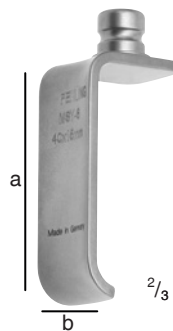
V-CUT
TITANIUM

FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



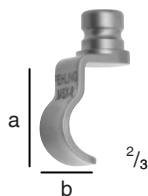
a \ b	15 mm	20 mm
15 mm	MTH-3	MTH-4
21 mm	MTH-5	MTH-6
26 mm	MTH-7	MTH-8

STERNAL BLADE
STERNUMHALTEBLATT



a \ b	15 mm	24 mm
40 mm	MSY-6	MSZ-6
50 mm	MSY-7	MSZ-7
60 mm	MSY-8	MSZ-8
70 mm	MSY-9	MSZ-9

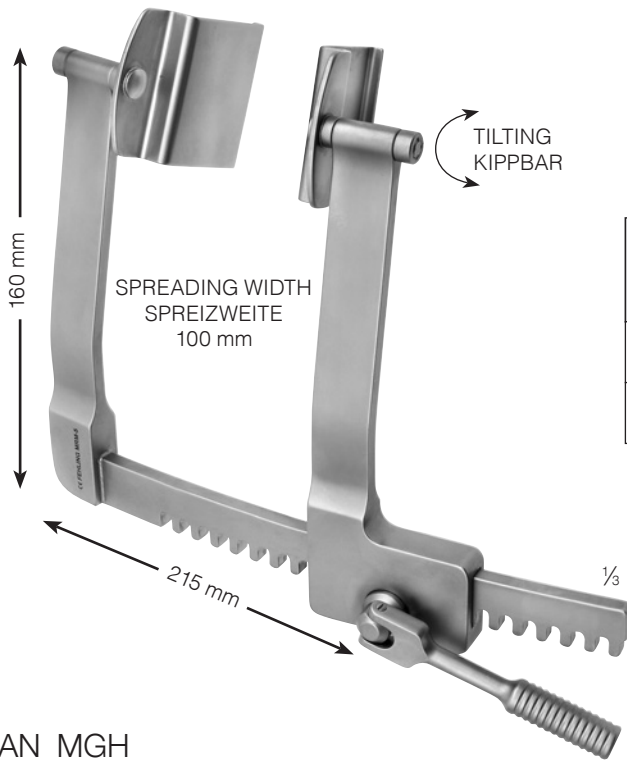
DIAPHRAGM RETRACTOR
ZWERCHFELLHAKEN



a \ b	10 mm
20 mm	MSX-6
30 mm	MSX-7
40 mm	MSX-8

LID RETRACTOR
LIDHAKEN

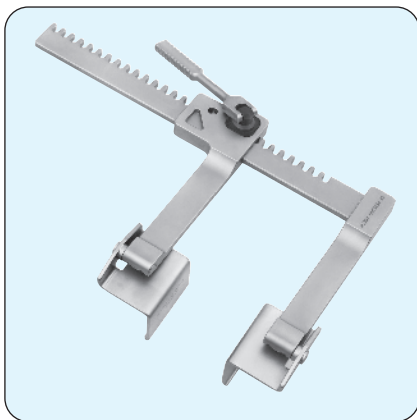
MARJAN



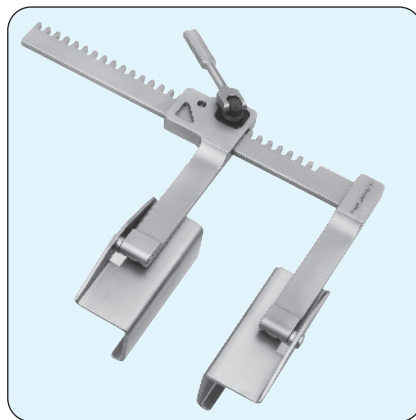
FOR PARTIAL STERNOTOMY
FÜR PARTIELLE STERNOTOMIE

BLADE SIZE BLATTGRÖSSE a x b	
35 x 50 mm	MRM-5
45 x 50 mm	MRM-6

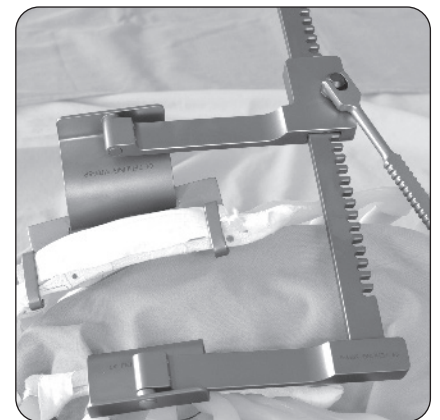
MARJAN MGH



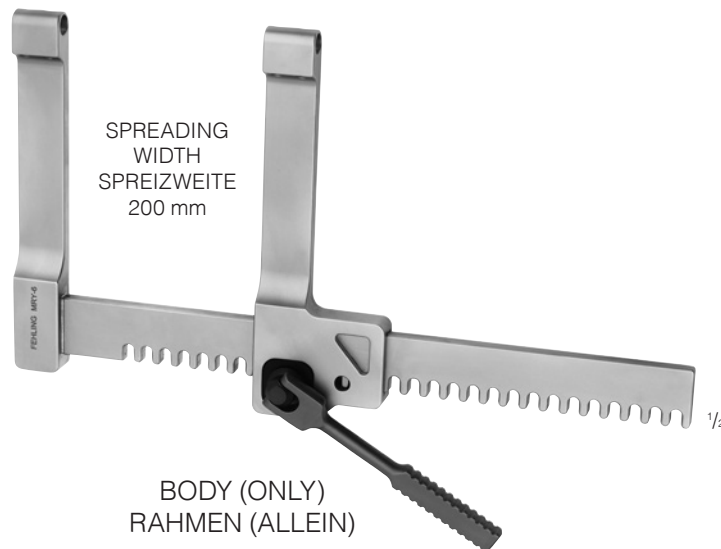
PARTIAL STERNOTOMY
PARTIELLE STERNOTOMIE



TOTAL STERNOTOMY
TOTALE STERNOTOMIE



IMA EXPOSURE
IMA EXPOSITION

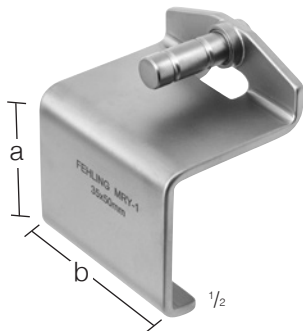


BODY (ONLY)
RAHMEN (ALLEIN)

MRY-6

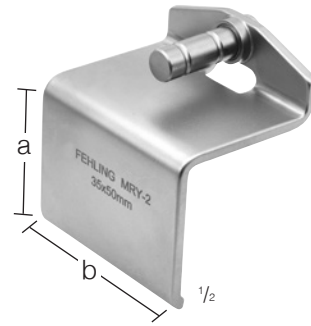
MARJAN MGH

RETRACTING BLADES
HALTEBLÄTTER



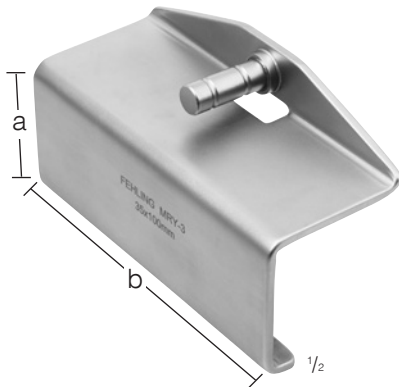
FOR PARTIAL STERNOTOMY / L-CUT (PAIR)
FÜR PARTIELLE STERNOTOMIE / L-SCHNITT (PAAR)

a x b	
35 x 50 mm	MRY-1



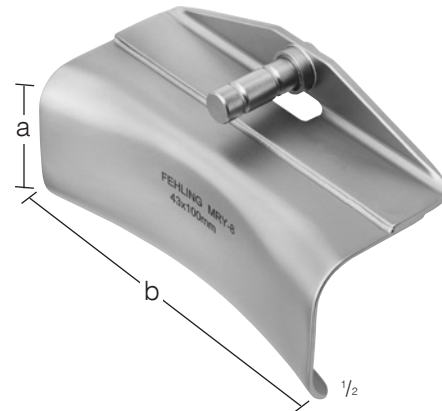
FOR PARTIAL STERNOTOMY / Z-CUT (PAIR)
FÜR PARTIELLE STERNOTOMIE / Z-SCHNITT (PAAR)

a x b	
35 x 50 mm	MRY-2



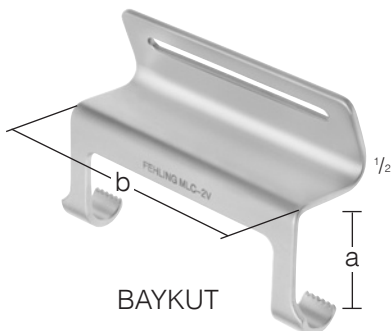
FOR TOTAL STERNOTOMY (PAIR)
FÜR TOTALE STERNOTOMIE (PAAR)

a x b	
35 x 70 mm	MRY-3K
35 x 100 mm	MRY-3
45 x 100 mm	MRY-4



FOR TOTAL STERNOTOMY, CONVEX (PAIR)
FÜR TOTALE STERNOTOMIE, KONVEX (PAAR)

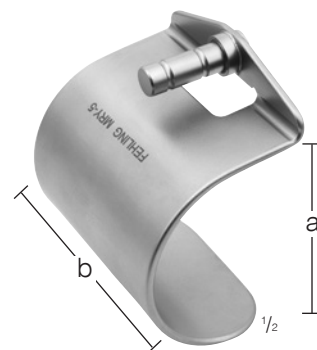
a x b	
34 x 100 mm	MRY-7
43 x 100 mm	MRY-8
50 x 100 mm	MRY-9
34 x 120 mm	MSD-0



BAYKUT

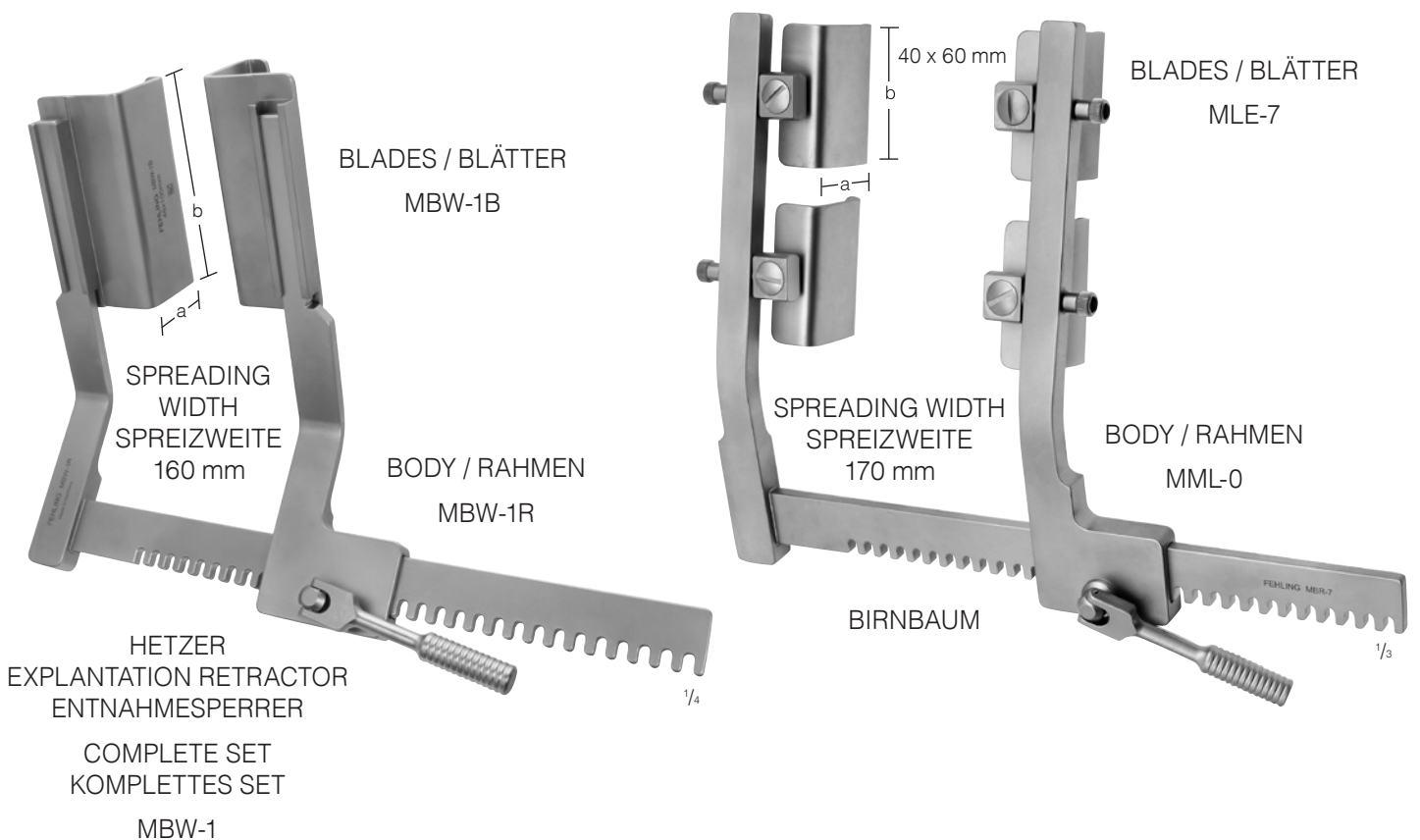
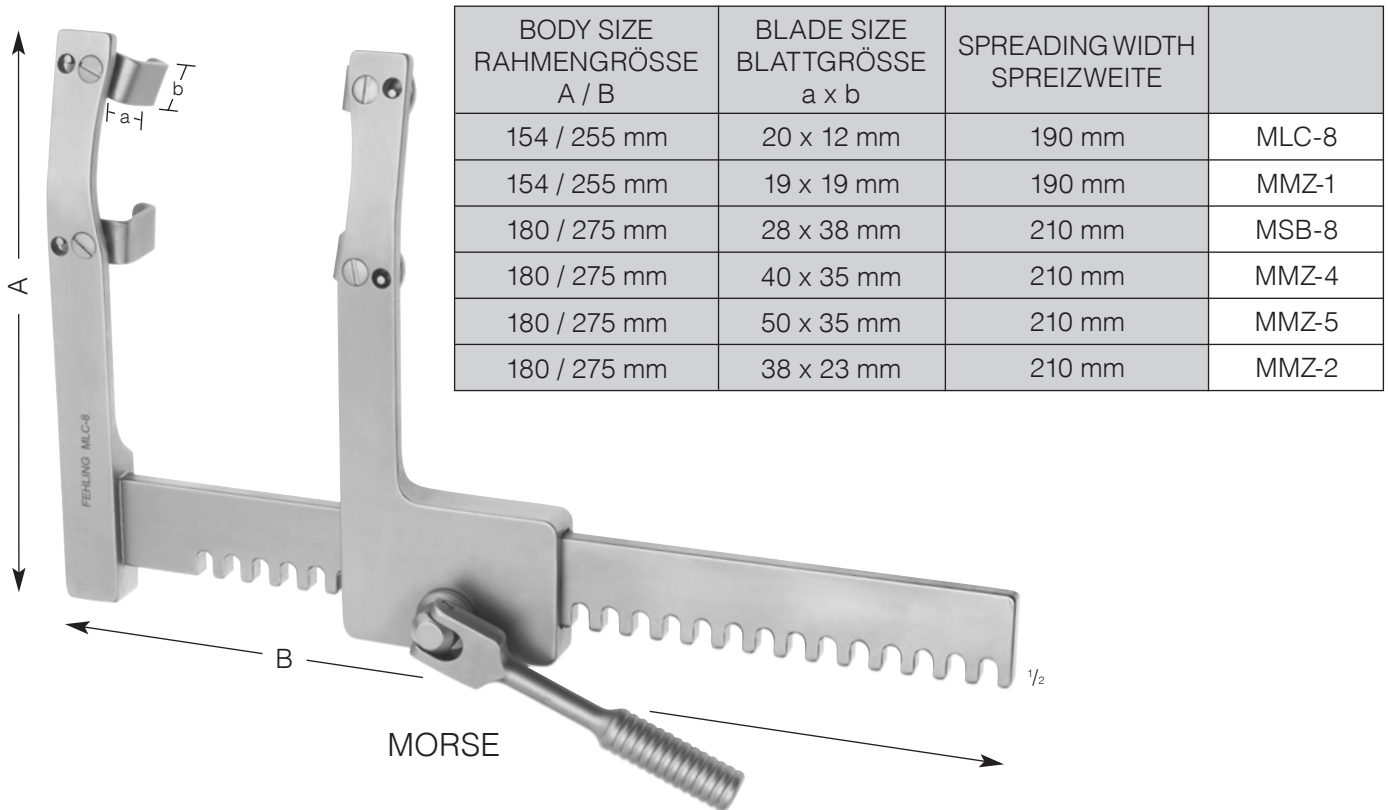
IMA RETRACTING BLADE
IMA HALTEBLATT

a x b	
15 x 50 mm	MLM-6V
15 x 90 mm	MLC-2V
15 x 120 mm	MLM-3V



FOR IMA EXPOSITION
FÜR IMA DARSTELLUNG

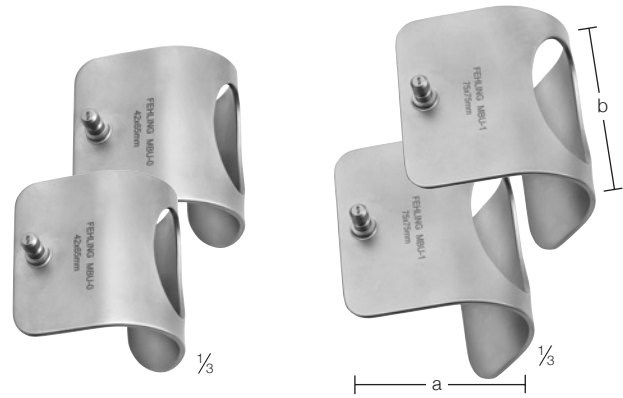
a x b	
30 x 65 mm	MSC-8
40 x 65 mm	MSC-9
50 x 65 mm	MRY-5





BODY / RAHMEN
MBU-5

MERCEDES
COMPLETE SET
KOMPLETTES SET
MBU-4



BLADES (PAIR) / BLÄTTER (PAAR)

(a) 48 x (b) 65 mm

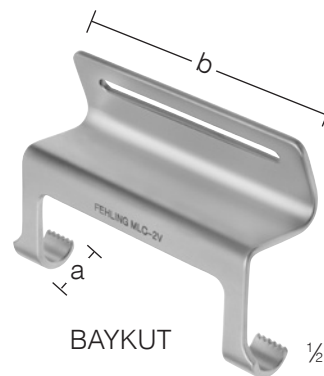
MBU-0

(a) 75 x (b) 75 mm

MBU-1



exemplary configuration
Konfigurationsbeispiel

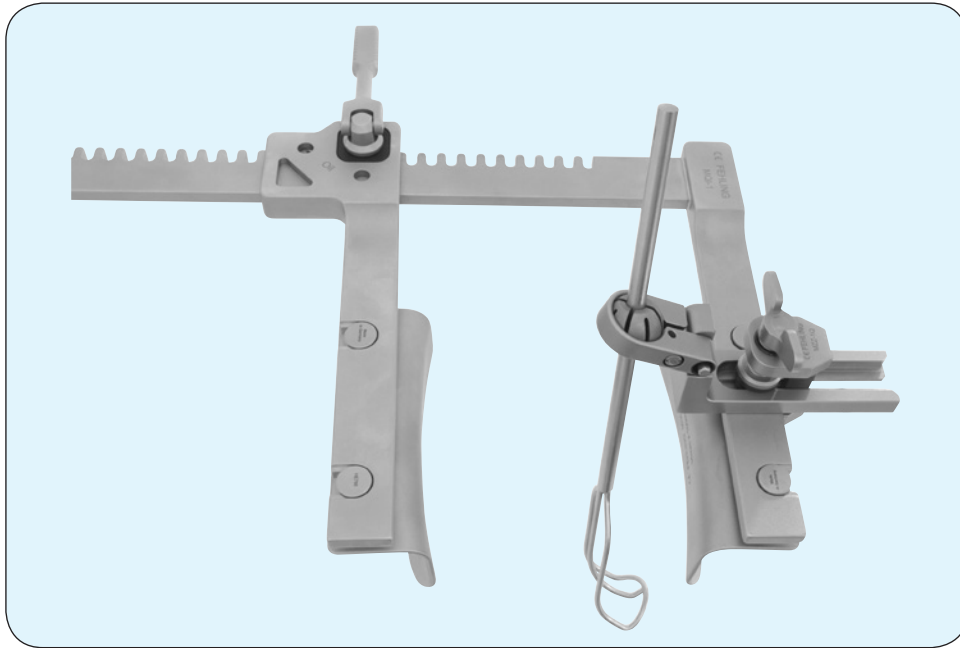


BAYKUT

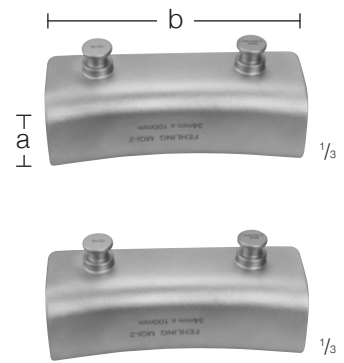
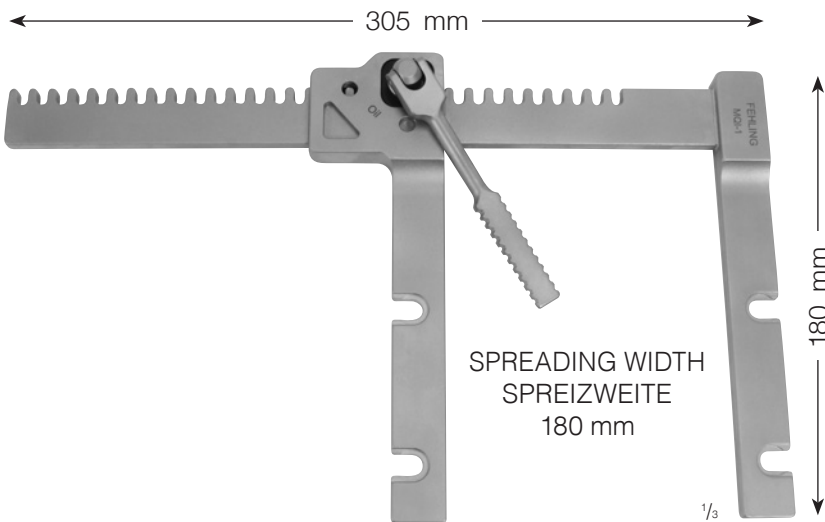
IMA RETRACTING BLADE
IMA HALTEBLATT

a x b	
15 x 50 mm	MLM-6V
15 x 90 mm	MLC-2V
15 x 120 mm	MLM-3V

FALK



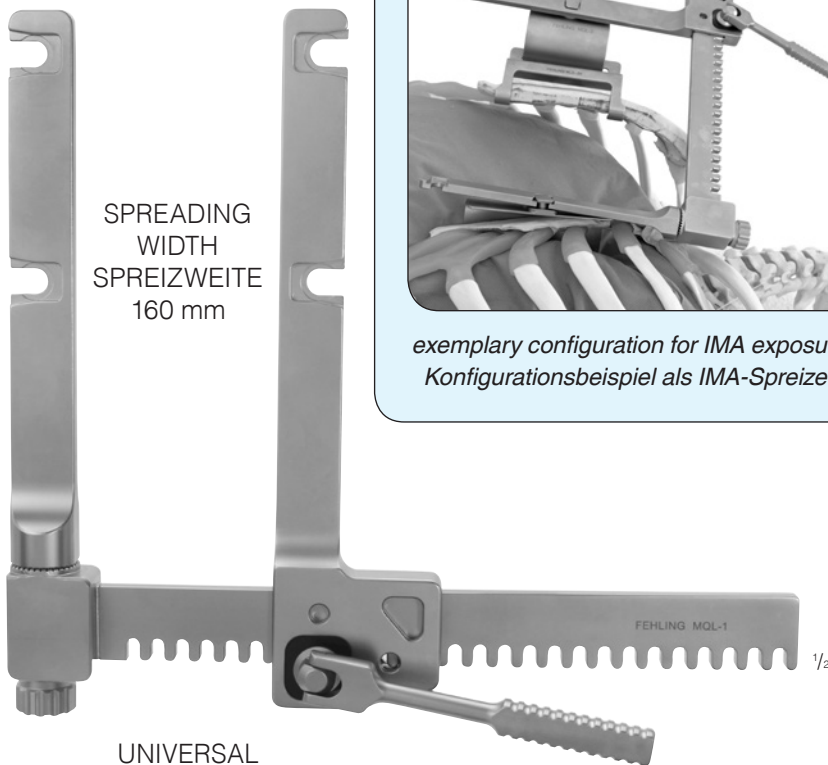
exemplary configuration
Konfigurationsbeispiel



RETRACTOR BLADE (PAIR)
SPREIZERBLATT (PAAR)

BLADE SIZE BLATTGRÖSSE a x b	
34 x 100 mm	MQI-2
43 x 100 mm	MQI-3

CEBOTARI



SPREADING
WIDTH
SPREIZWEITE
160 mm

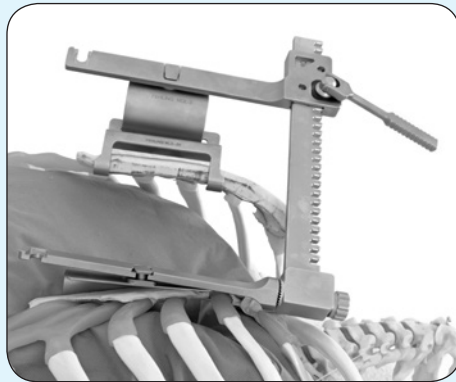
UNIVERSAL
STERNAL RETRACTOR
UNIVERSAL
STERNUMSPREIZER

MQL-1

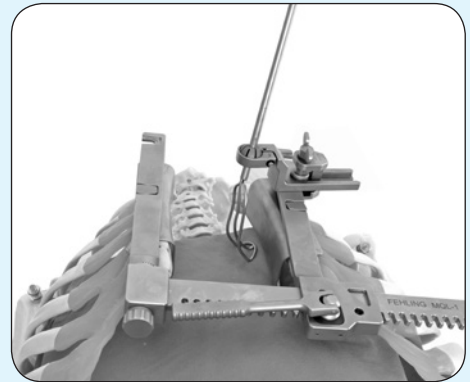


IMA BLADE
IMA-BLATT

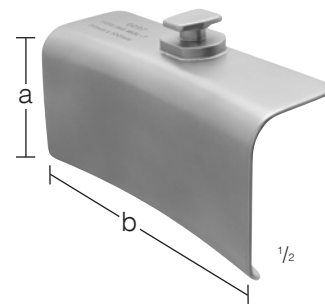
MQL-3



exemplary configuration for IMA exposure¹
Konfigurationsbeispiel als IMA-Spreizer¹



exemplary configuration with atrial retractor²
Konfigurationsbeispiel mit atrialem Haken²



STERNOTONOMY BLADE (PAIR)
STERNUMBLATT (PAAR)

BLADE SIZE BLATTGRÖSSE a x b	
34 x 50 mm	MQL-4
43 x 50 mm	MQL-5
34 x 100 mm	MQL-6
43 x 100 mm	MQL-2
50 x 100 mm	MQL-7
63 x 100 mm	MQL-8
34 x 120 mm	MQL-9
43 x 120 mm	MQM-1
50 x 120 mm	MQM-2
63 x 120 mm	MQM-3

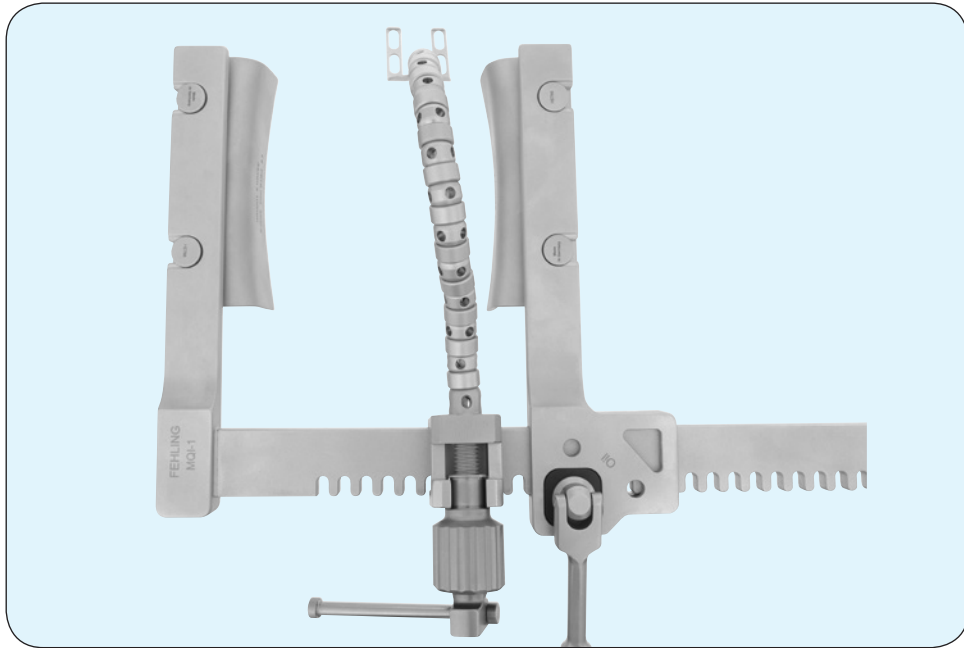
ACCESSORIES / ZUBEHÖR

¹ for IMA exposure / zur Darstellung der IMA
Baykut-IMA blade / Baykut-IMA-Blatt
MLC-2V
see page 2/8 / siehe Seite 2/8

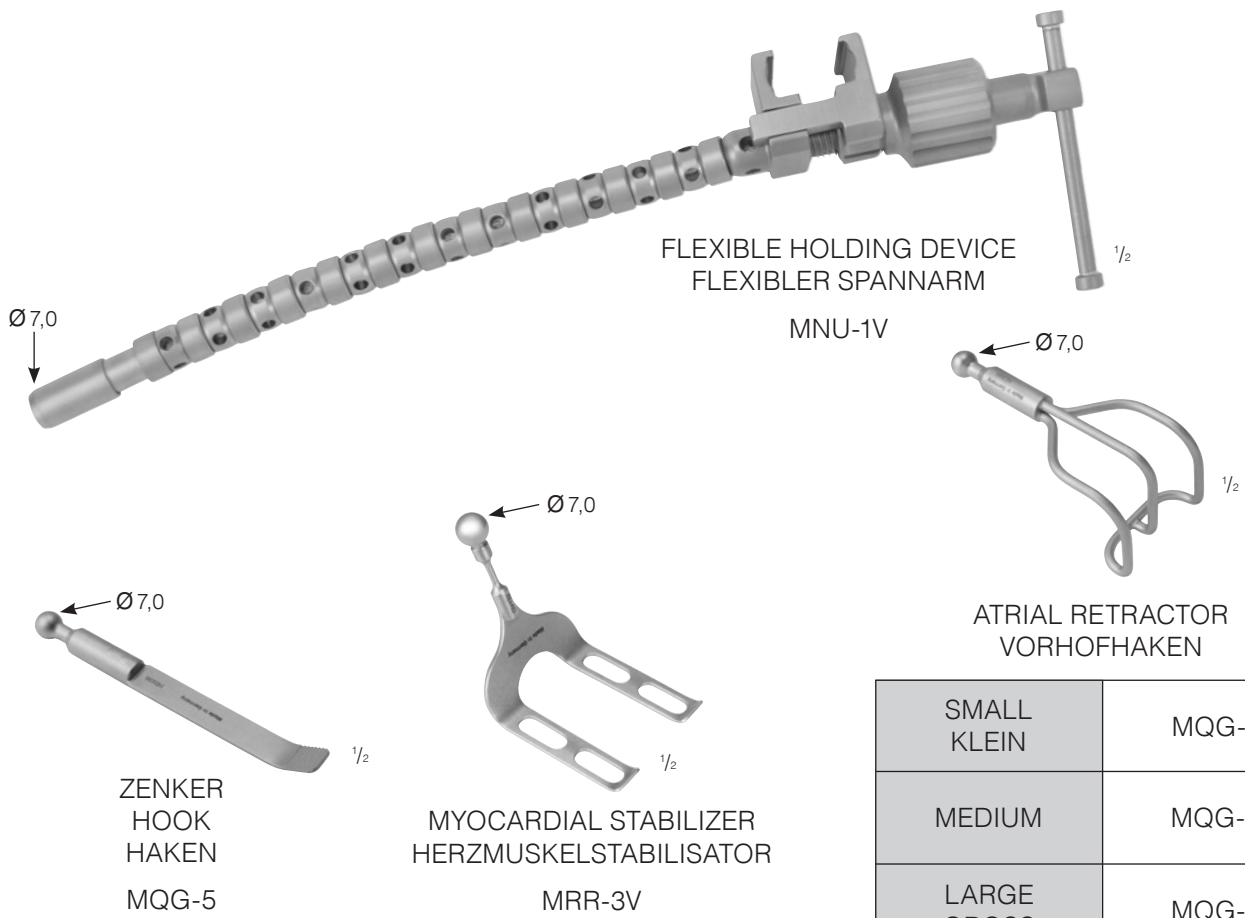
² for atrial retraction / zur Vorhofretraktion
Ball adapter / Kugeladapter +
Atrial retractor / Vorhofhaken
see page 2/24 / siehe Seite 2/24

Blades optional usable for
FALK RETRACTOR see page 2/11

Blätter optional nutzbar für
FALK SPREIZER siehe Seite 2/11

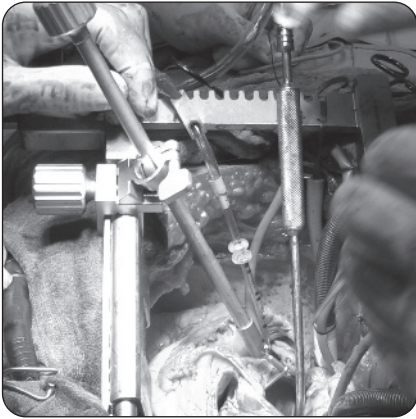


*exemplary configuration
Konfigurationsbeispiel*

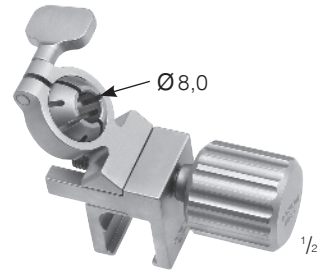


SMALL KLEIN	MQG-1
MEDIUM	MQG-2
LARGE GROSS	MQG-3

ACCESSORIES FOR VALVE SURGERY
ZUBEHÖR FÜR KLAPPENCHIRURGIE

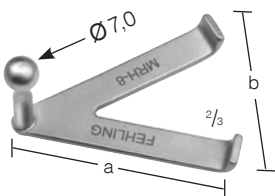


exemplary configuration
Konfigurationsbeispiel



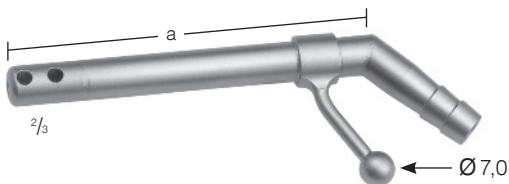
BALL JOINT ADAPTER*
(FOR BLADE GUIDE MRF-0V)
KUGELGELENKADAPTER*
(FÜR HAKENFÜHRUNG MRF-0V)

MRF-1V



ATRIAL FORK
VORHOFGABEL

BLADE SIZE BLATTGRÖSSE a x b	
30 x 25 mm	MRH-7
40 x 35 mm	MRH-8
50 x 45 mm	MRH-9



ATRIAL SUCTION DOWNHOLDER
ATRIALER SAUGNIEDERHALTER

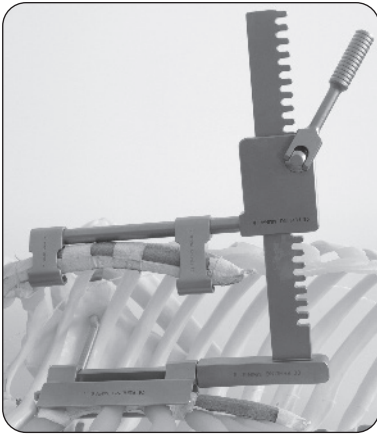
DEPTH TIEFE a	
60 mm	MRJ-5
70 mm	MRJ-6
80 mm	MRJ-7



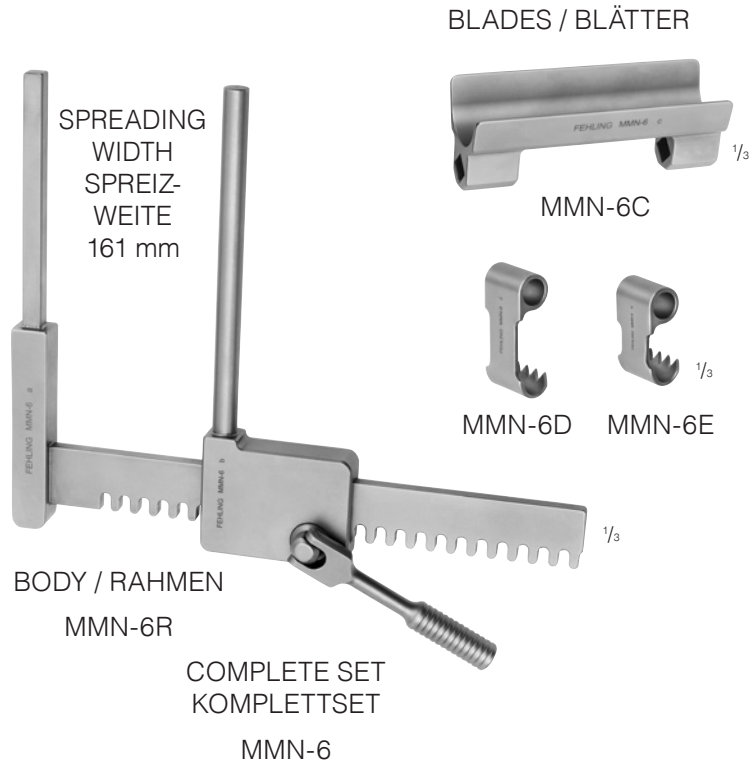
BLADE GUIDE
HAKENFÜHRUNG
200 mm
MRF-0V

*adaptable to most sternal retractors / verwendbar für die meisten Sternumspreizer

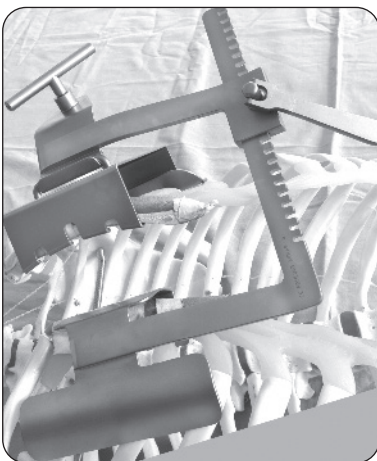
DC-VERSION



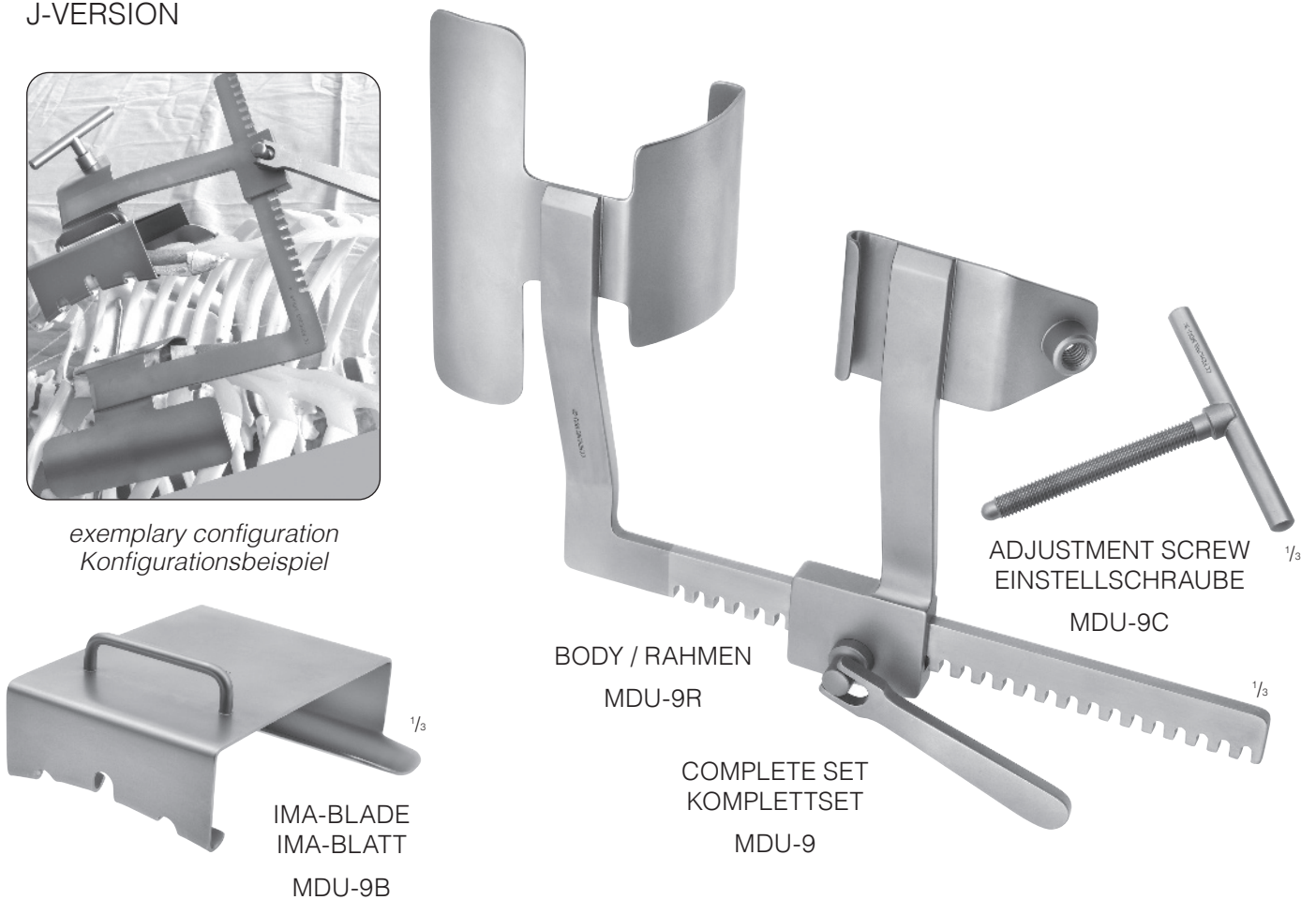
*exemplary configuration
Konfigurationsbeispiel*

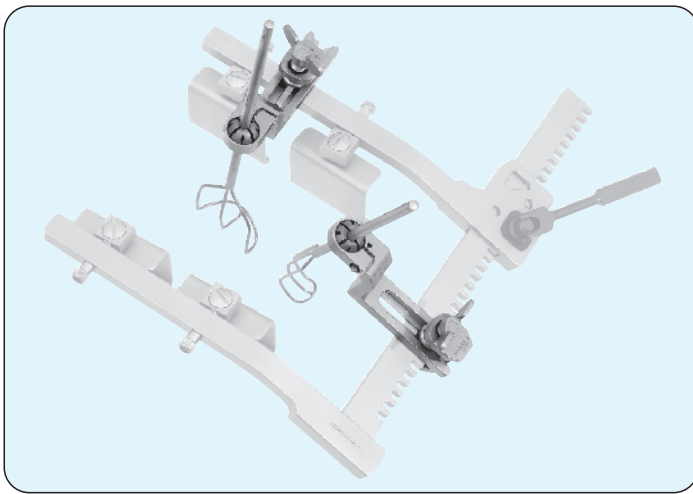


J-VERSION



*exemplary configuration
Konfigurationsbeispiel*





exemplary configuration
Konfigurationsbeispiel

Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4 required for tightening.

Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4 zum Anziehen erforderlich.

For adapters with wing screw no screwdriver required.

Für Adapter mit Flügelschraube kein Schraubendreher erforderlich



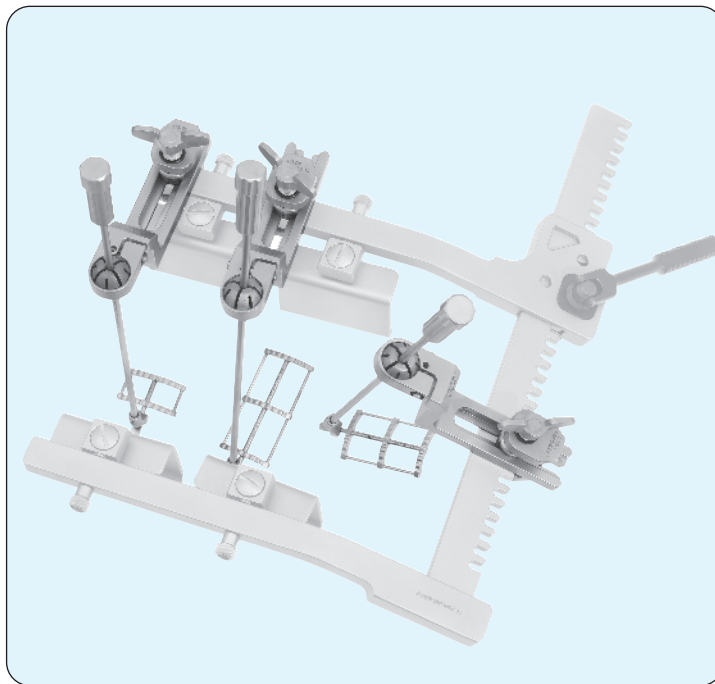
BALL JOINT ADAPTER BAYONET*
+ CLAMPING ELEMENT
KUGELADAPTER, BAYONETT*
+ BEFESTIGUNGSELEMENT

MRV-0F + MZZ-1N

* additional suitable adapters and clamping elements see page 2/24
* Weitere passende Adapter und Befestigungselemente siehe Seite 2/24

HOHE ATRIAL RETRACTORS, MALLEABLE
HOHE VORHOFHAKEN, BIEGSAM

LENGTH LÄNGE	45 x 45 mm a x b	LENGTH LÄNGE	65 x 20 mm a x b	LENGTH LÄNGE	65 x 30 mm a x b	65 x 40 mm a x b
150 mm	MRV-2H	150 mm	MRV-4H	150 mm	MRV-3H	200 mm
200 mm	MRV-2L	200 mm	MRV-4L	200 mm	MRV-3L	MPF-1H

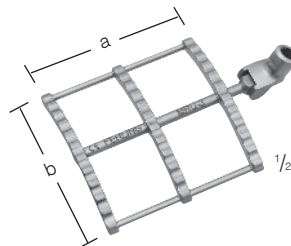


exemplary configuration
Konfigurationsbeispiel

Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4 required for tightening.
Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4 zum Anziehen erforderlich.

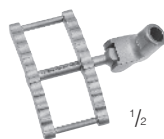


BLADE GUIDE
HAKENFÜHRUNG
220 mm
MRN-3

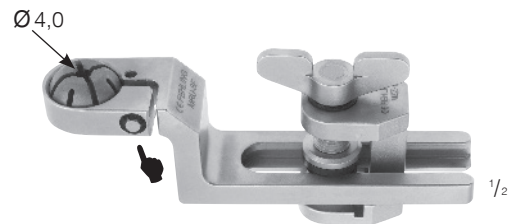


ATRIAL BLADE
VORHOFBÜGEL

a x b	
45 x 30 mm	MRU-1
60 x 30 mm	MRU-2
45 x 45 mm	MRU-3
60 x 45 mm	MRU-4



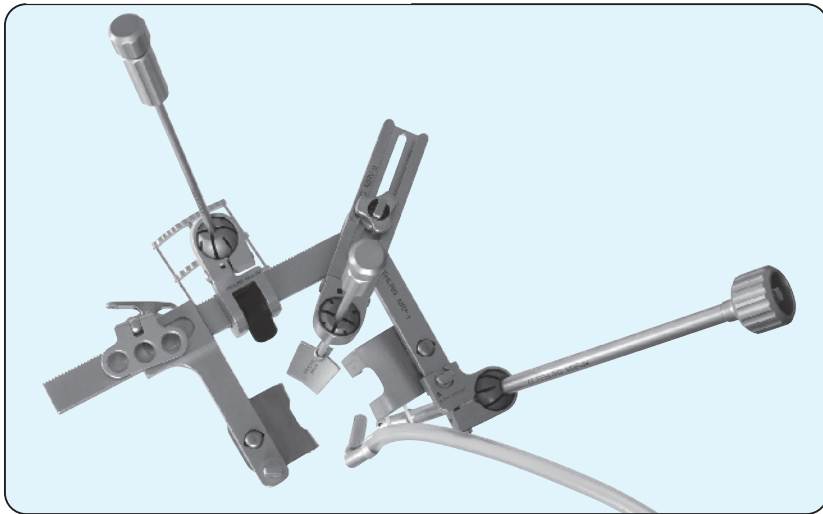
ATRIAL BLADE
FOR TRICUSPIDAL VALVE
VORHOFBLATT
FÜR TRIKUSPIDALKLAPPE
18 x 35 mm
MRU-5



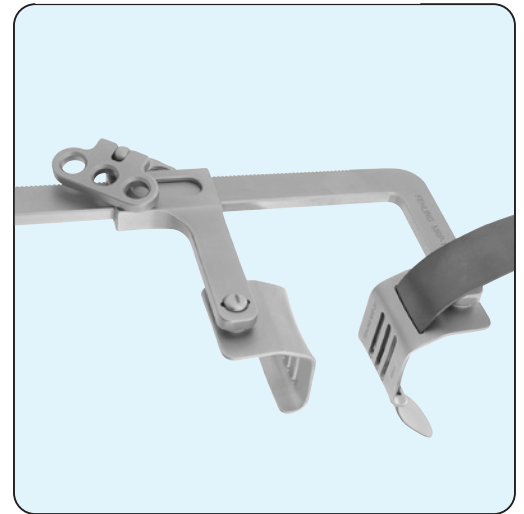
BALL JOINT ADAPTER BAYONET*
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, BAYONETT*
LÄNGE UND HÖHE VARIABEL
+ BEFESTIGUNGSELEMENT

MRU-8F + MZZ-1Q

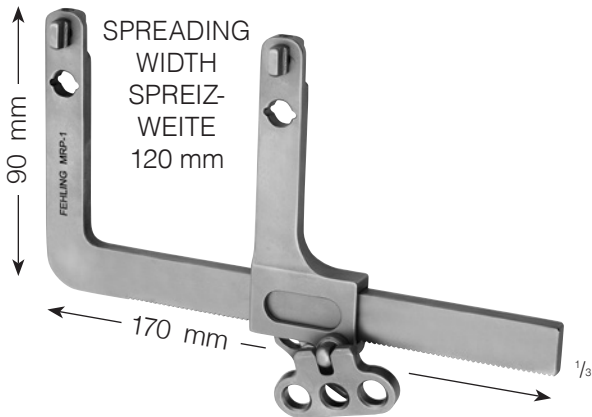
* additional suitable adapters and clamping elements see page 2/24
* Weitere passende Adapter und Befestigungselemente siehe Seite 2/24



exemplary configuration
Konfigurationsbeispiel

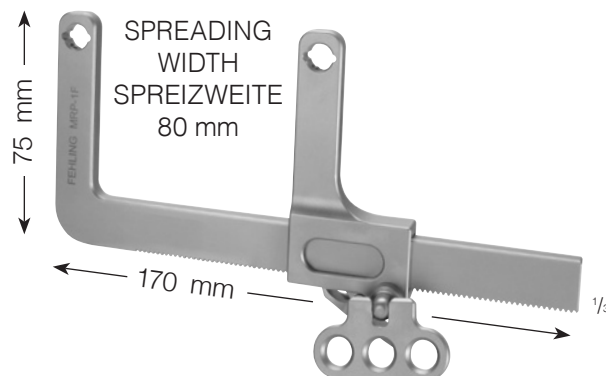


exemplary configuration
Konfigurationsbeispiel



INTERCOSTAL RETRACTOR
INTERCOSTALSPREIZER

MRP-1



INTERCOSTAL RETRACTOR SHORT ARM
INTERCOSTALSPREIZER KURZARM

MRP-1F

RETRACTING BLADES (PAIR)*
HALTEBLÄTTER (PAAR)*

BLADE SIZE BLATTGRÖSSE a x b				
40 x 35 mm	MRP-2	MRP-2V	MRP-2F	MRP-2K
50 x 35 mm	MRP-3	MRP-3V	MRP-3F	MRP-3K
60 x 35 mm	MRP-4	MRP-4V	MRP-4F	MRP-4K
70 x 35 mm	MRO-7	MRO-7V		
80 x 35 mm		MRQ-7		
90 x 35 mm		MRQ-8		
100 x 35 mm		MRQ-9		



CERAMO® SUPERPLAST
SPATULA
SPATEL
24 x 250 mm
EOJ-7

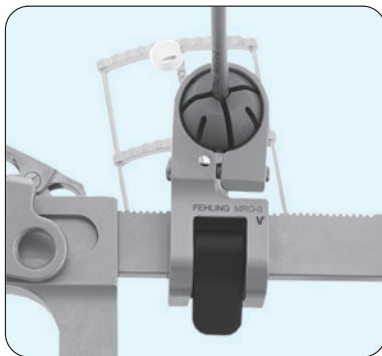
*auxiliary tool: blade ejector NGM-6 see page 2/39
*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/39

MVR RETRACTOR ACCESSORIES
MKR SPREIZER ZUBEHÖR

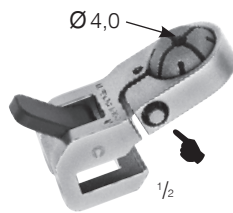


BLADE GUIDE
HAKENFÜHRUNG
220 mm
MRN-3

RETRACTION OF THE AORTIC ROOF
RETRAKTION DES VORHOFDACHS



*exemplary configuration
Konfigurationsbeispiel*

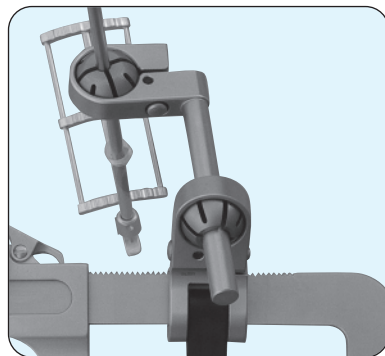


BALL ADAPTER
KUGELADAPTER
MRO-0V*

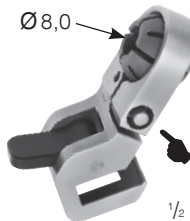
* with wing screw: MRO-0
* mit Flügelschraube: MRO-0

Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4 required for tightening.
Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4 zum Anziehen erforderlich.

For adapters with wing screw no screwdriver required.
Für Adapter mit Flügelschraube kein Schraubendreher erforderlich.

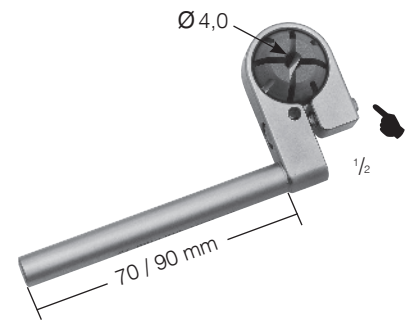


*exemplary configuration
Konfigurationsbeispiel*



BALL ADAPTER FOR MRR-2V/L
KUGELADAPTER FÜR MRR-2V/L
MRR-1V*

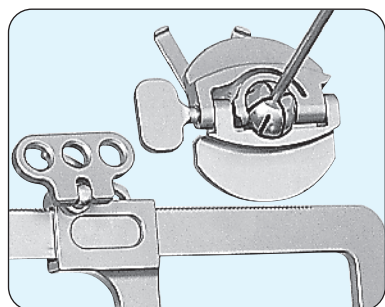
* with wing screw: MRR-1
* mit Flügelschraube: MRR-1



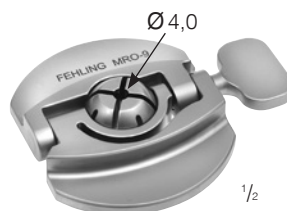
BALL ADAPTER
WITH DISTANCE ELEVATOR
KUGELADAPTER
MIT DISTANZHEBEL

70 mm	90 mm
MRR-2V*	MRR-2L

* with wing screw: MRR-2
* mit Flügelschraube: MRR-2

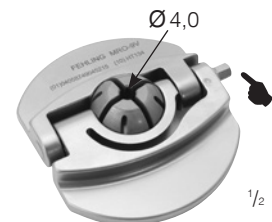


*exemplary configuration
Konfigurationsbeispiel*



FIXATION DEVICE FOR MRN-3
(FOR EXTERNAL STAB INCISION)
FIXIERVORRICHTUNG FÜR MRN-3
(FÜR SEPARATE STICHINZISION)

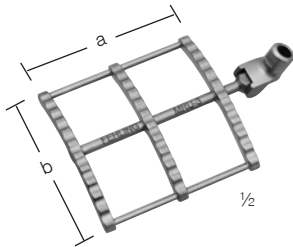
MRO-9



FIXATION DEVICE FOR MRN-3
(FOR EXTERNAL STAB INCISION)
FIXIERVORRICHTUNG FÜR MRN-3
(FÜR SEPARATE STICHINZISION)

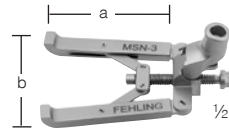
MRO-9V

MVR RETRACTOR ACCESSORIES
MKR SPREIZER ZUBEHÖR



ATRIAL BLADE
VORHOFBÜGEL

a x b	
30 x 30 mm	MRX-2
30 x 45 mm	MRX-3
45 x 30 mm	MRU-1
60 x 30 mm	MRU-2
45 x 45 mm	MRU-3
60 x 45 mm	MRU-4



ATRIAL RETRACTOR, EXPANDABLE*
VORHOFGABEL, AUFSPREIZBAR*

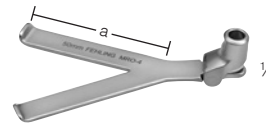
a x b	
35 x 25 mm	MSN-2
55 x 30 mm	MSN-3

*cardan screw driver LMT-4 required
Kardanschraubendreher LMT-4 erforderlich



ATRIAL BLADE
VORHOFBLATT

a x b	
30 x 8 mm	MRN-4
40 x 8 mm	MRN-5
50 x 8 mm	MRN-6



ATRIAL HOOK
VORHOFGABEL

- a -	
30 mm	MRO-2
40 mm	MRO-3
50 mm	MRO-4
60 mm	MRO-5
70 mm	MRO-6

GUIDING CLAMPS FOR THE INSERTION OF ATRIAL BLADES / SEPTUM HOLDERS
FÜHRUNGSZANGEN ZUM EINSpanNEN VON VORHOFBLÄTTERN / SEPTUMNIEDERHALTERN



GUIDING FORCEPS
FÜHRUNGSZANGE
260 mm

MRN-7

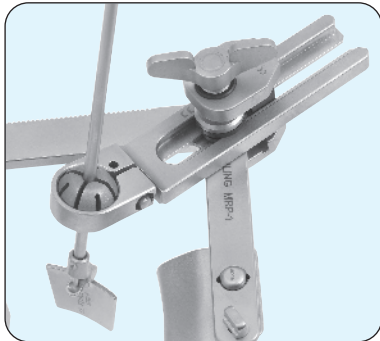


GUIDING CLAMP
FÜHRUNGSKLEMME

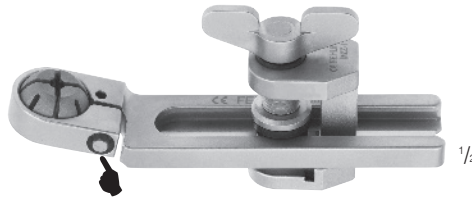
MRU-9

MVR RETRACTOR ACCESSORIES
MKR SPREIZER ZUBEHÖR

HOLDING THE SEPTAL FOLD DOWN
NIEDERHALTEN DER SEPTUMFALTE



*exemplary configuration
Konfigurationsbeispiel*



BALL JOINT ADAPTER
+ CLAMPING ELEMENT
KUGELADAPTER, GERADE
+ BEFESTIGUNGSELEMENT

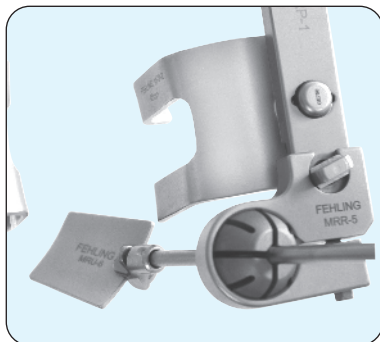
MRV-9F + MZZ-1Q*

* additional suitable adapters and
clamping elements see page 2/24
* Weitere passende Adapter und
Befestigungselemente siehe Seite 2/24

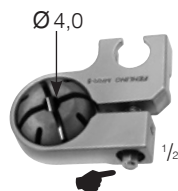


RETAINER FOR SEPTAL FOLD
AND DIAPHRAGM
NIEDERHALTER FÜR SEPTUMFALTE
UND ZWERCHFELL

MRU-6



*exemplary configuration
Konfigurationsbeispiel*



LEFT / LINKS

MRR-5



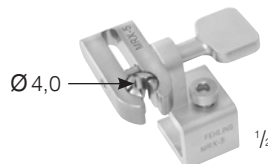
RIGHT / RECHTS

MRR-6

BALL ADAPTER
KUGELADAPTER

only with MRP-1
nur mit MRP-1

Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4 required for tightening.
Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4 zum Anziehen erforderlich.
For adapters with wing screw no screwdriver required.
Für Adapter mit Flügelschraube kein Schraubendreher erforderlich



BALL JOINT ADAPTER MINI FRONT LOAD
KUGELADAPTER MINI FRONT LOAD

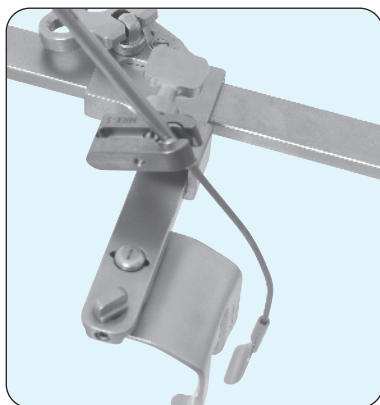
MRX-5*

* Screwdriver TXW-9X required.

* Schraubendreher TXW-9X erforderlich.



RETRACTION OF THE MV CUSP
RETRAKTION DES MK-SEGELS



*exemplary configuration
Konfigurationsbeispiel*



SUPERPLAST
MALLEABLE RETRACTOR FOR MV CUSP
BIEGBARER RETRAKTOR FÜR MK-SEGEL
250 mm

MRX-1V

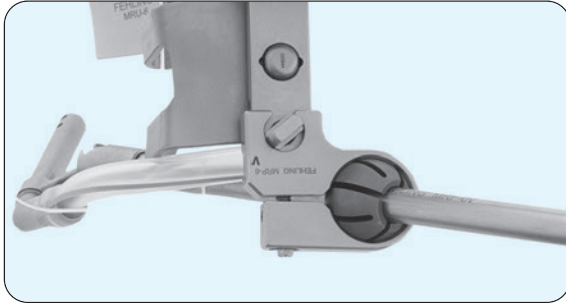


SUPERPLAST
MALLEABLE LID HOOK
BIEGBARER LIDHAKEN
12 x 14 x 250 mm

MRX-6

MVR RETRACTOR ACCESSORIES
MKR SPREIZER ZUBEHÖR

HOLDING THE INCISED ATRIUM OPEN
OFFENHALTEN DES INZIDIERTEN VORHOFS



exemplary configuration
Konfigurationsbeispiel



BALL ADAPTER
KUGELADAPTER

LEFT / LINKS

RIGHT / RECHTS

MRP-5V*

only with MRP-1
nur mit MRP-1

MRP-6V*

* with wing screw: MRP-5
* mit Flügelschraube: MRP-5

* with wing screw: MRP-6
* mit Flügelschraube: MRP-6

Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4 required for tightening.

Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4 zum Anziehen erforderlich.

For adapters with wing screw no screwdriver required.

Für Adapter mit Flügelschraube kein Schraubendreher erforderlich.



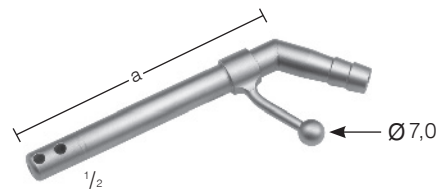
BLADE GUIDE
HAKENFÜHRUNG
200 mm

MRF-0V



INSERTION FORCEPS FOR MRJ-5,6,7
EINFÜHRZANGE FÜR MRJ-5,6,7

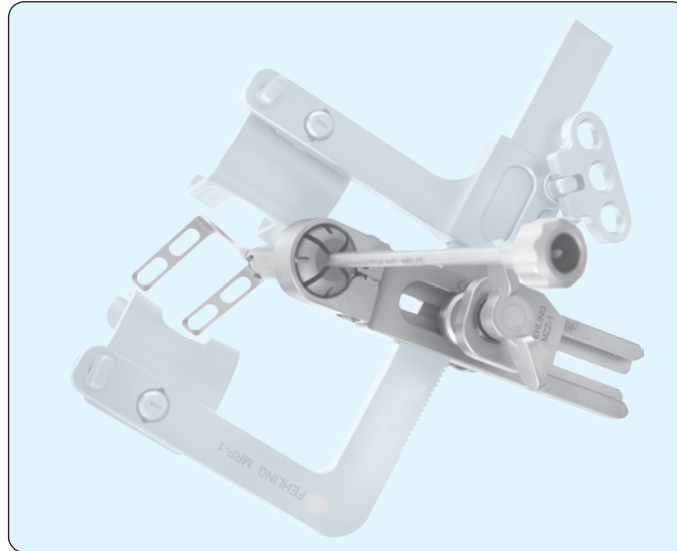
MRJ-4



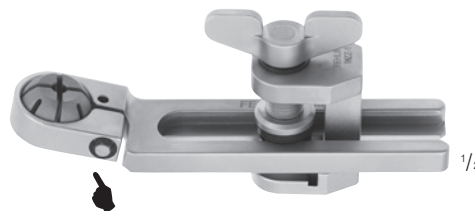
LATERAL ATRIAL RETRACTOR /
SUCTION DEVICE
SAUGNIEDERHALTER FÜR
LATERALE RETRAKTION DES VORHOFS

DEPTH TIEFE a	
60 mm	MRJ-5
70 mm	MRJ-6
80 mm	MRJ-7

MIDCAB/OPCAB RETRACTOR ACCESSORIES
MIDCAB/OPCAB SPREIZER ZUBEHÖR



*exemplary configuration
Konfigurationsbeispiel*



BALL JOINT ADAPTER
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, GERADE
LÄNGE UND HÖHE VARIABEL
+ BEFESTIGUNGSELEMENT

MRV-9F + MZZ-1Q



BLADE GUIDE
HAKENFÜHRUNG

☝ Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4 required for tightening.
Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4 zum Anziehen erforderlich.



MYOCARDIAL MUSCLE STABILIZER
HERZMUSKELSTABILISATOR

MRR-3V

LENGTH LÄNGE	
120 mm	MRI-OS
200 mm	MRI-OL

ADAPTERS ADJUSTABLE IN HEIGHT AND LENGTH
HÖHEN- UND LÄNGENVERSTELLBARE ADAPTER



MRU-8F 1/2

WITH INSIDE SCREW
MIT INNENLIEGENDER SCHRAUBE



MRV-0F 1/2

WITH INSIDE SCREW
MIT INNENLIEGENDER SCHRAUBE



MRV-0J 1/2

WITH INSIDE SCREW
MIT INNENLIEGENDER SCHRAUBE



MRV-0R 1/2

WITH WING SCREW
MIT FLÜGELSCHRAUBE



MRV-1F 1/2

WITH INSIDE SCREW
MIT INNENLIEGENDER SCHRAUBE



MRV-9F 1/2

WITH INSIDE SCREW
MIT INNENLIEGENDER SCHRAUBE

Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4 required for tightening.
Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4 zum Anziehen erforderlich.
For adapters with wing screw no screwdriver required.
Für Adapter mit Flügelschraube kein Schraubendreher erforderlich.



SUITABLE CLAMPING ELEMENTS
PASSENDE BEFESTIGUNGSELEMENTE



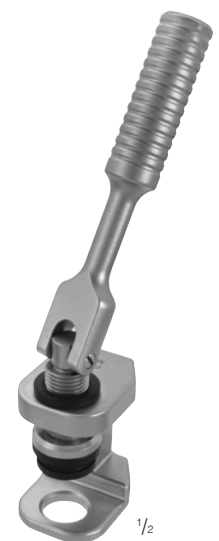
MZZ-1N 1/2

SUITABLE TO RETRACTOR
BAR HEIGHT
PASSEND ZU SPREIZER
BALKENHÖHE
3,0 - 13,0 mm



MZZ-1Q 1/2

SUITABLE TO RETRACTOR
BAR HEIGHT
PASSEND ZU SPREIZER
BALKENHÖHE
4,5 - 13,0 mm



MZZ-2 1/2

SUITABLE TO RETRACTOR
BAR HEIGHT
PASSEND ZU SPREIZER
BALKENHÖHE
4,5 - 13,0 mm

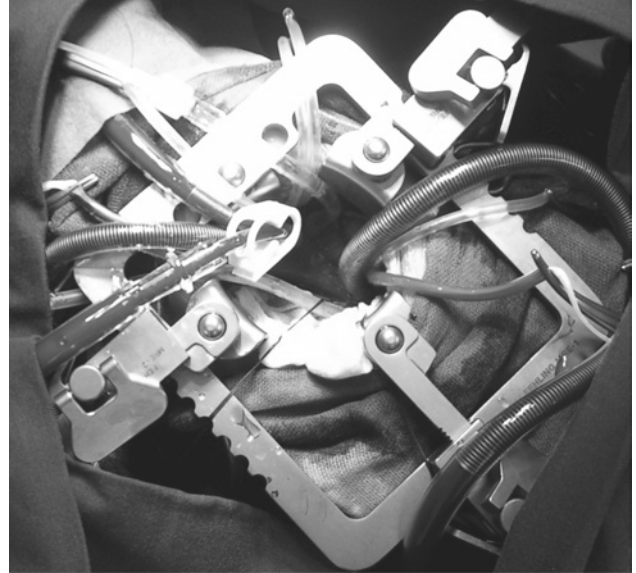
FANTASMICS

FOR MINIMALLY INVASIVE SURGERY
FÜR MINIMALINVASIVE CHIRURGIE



BODY / RAHMEN
MRE-1V

including / einschliesslich
1 x MRE-3V
1 x MRE-8V
1 x MRD-9V



exemplary configuration
Konfigurationsbeispiel



COUPLING RIDER
FIXIERSCHLITTEN
MRE-2V



CROSS BRACKET FOR BLADES
QUERBÜGEL FÜR HALTEBLÄTTER
35 mm
MRD-8V



CROSS BRACKET FOR BLADES
QUERBÜGEL FÜR HALTEBLÄTTER
60 mm
MRD-9V

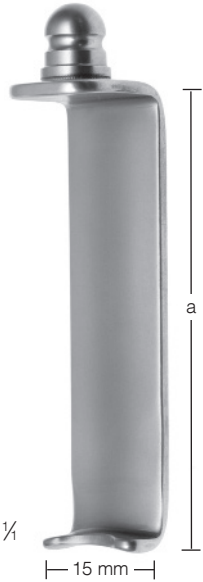


BLADE GUIDE
HAKENFÜHRUNG
MRE-3V

FANTASMICS

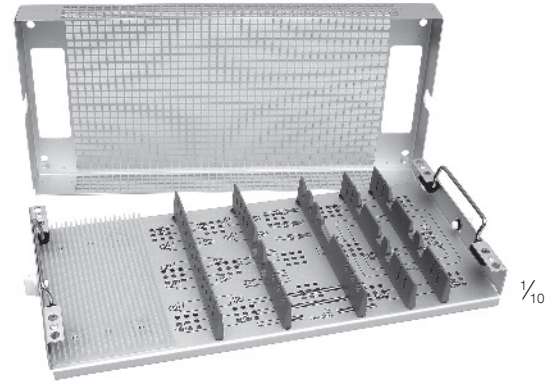
FOR MINIMALLY INVASIVE SURGERY
FÜR MINIMALINVASIVE CHIRURGIE

RETRACTING BLADES*
HALTEBLÄTTER*



DEPTH TIEFE a	
35 mm	MRI-1
45 mm	MRI-2
55 mm	MRI-3
65 mm	MRI-4
75 mm	MRI-5
85 mm	MRI-6
95 mm	MRI-7

*auxiliary tool: blade ejector NGM-6 see page 2/39
*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/39



STORAGE AND
STERILISATION TRAY
AUFBEWAHRUNGS- UND
STERILISATIONSCONTAINER
511 x 243 mm

MRE-0

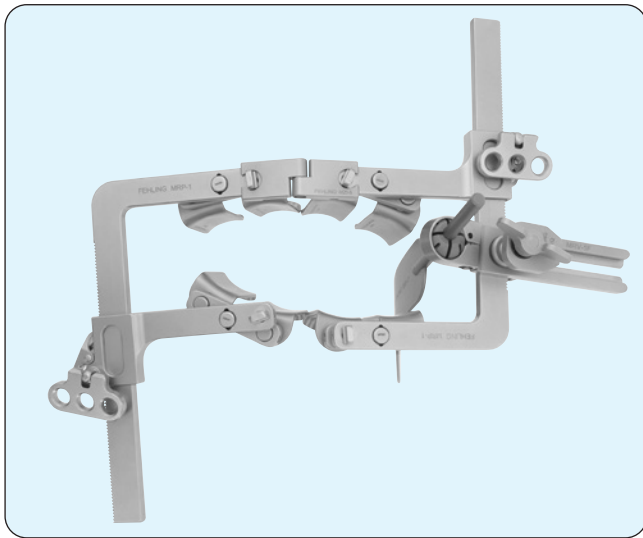
a x b = 12 x 7,5 mm



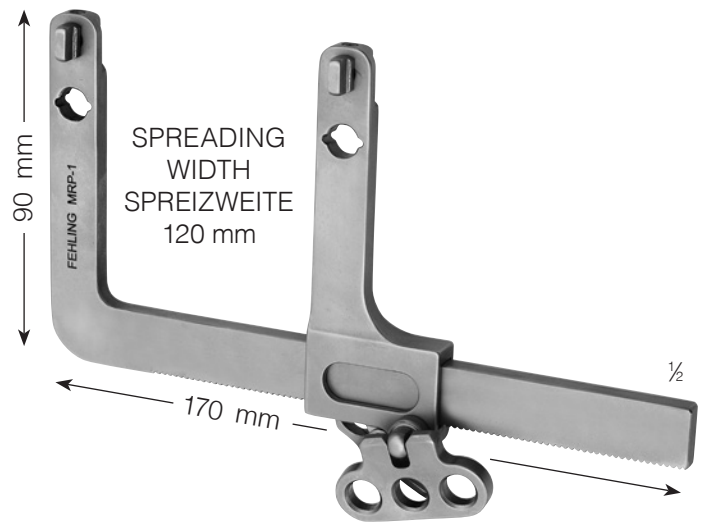
MINI THORACOTOMY RETRACTOR (PEDIATRIC)
MINI-THORAKOTOMIESPREIZER (PÄDIATRISCH)
115 mm

MSD-5

RETRACTOR FOR MILuTX
RETRAKTOR FÜR MILuTX

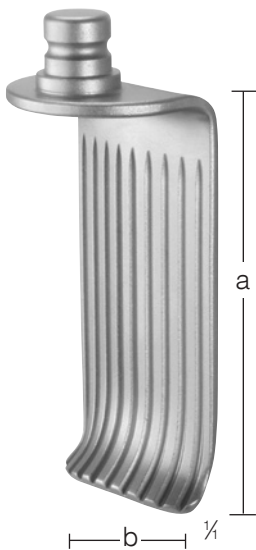


exemplary configuration
Konfigurationsbeispiel



MICS INTERCOSTAL RETRACTOR
MICS INTERCOSTALSPREIZER

MRP-1



RETRACTING BLADES*
HALTEBLÄTTER*

DEPTH TIEFE a	WIDTH / BREITE b	
	15 mm	24 mm
23 mm	–	MRE-4M
33 mm	MRI-1M	MRE-5M
43 mm	MRI-2M	MRE-6M
53 mm	MRI-3M	MRE-7M
63 mm	MRI-4M	MRE-8M
73 mm	MRI-5M	MRE-9M
83 mm	MRI-6M	MRI-8M
93 mm	MRI-7M	MRI-9M

* auxiliary tool: blade ejector NGM-6 see catalogue 2/39
Hilfsmittel: Blattentferner NGM-6 siehe Katalog 2/39



HINGE CONNECTOR
GELENKVERBINDER

MZI-5



CROSS BRACKET FOR RETRACTING BLADES
QUERBÜGEL FÜR HALTEBLÄTTER

35 mm
MRD-8V



CROSS BRACKET FOR RETRACTING BLADES
QUERBÜGEL FÜR HALTEBLÄTTER

60 mm
MRD-9V

RETRACTOR FOR MILuTX
RETRAKTOR FÜR MILuTX

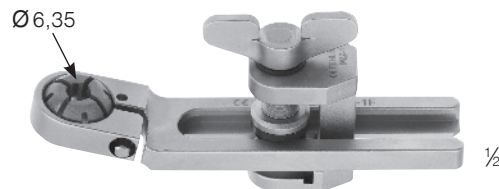
SUPERPLAST
LUNG/DIAPHRAGM RETRACTOR, MALLEABLE (Ø 6,35)
LUNGEN-/ZWERCHFELLRETRAKTOR, BIEGSAM (Ø 6,35)



THICKNESS STÄRKE	70x35x225 mm
1,25 mm	MRV-7V
2,0 mm	MRV-7



THICKNESS STÄRKE	70x35x182 mm
1,25 mm	MRV-8V
2,0 mm	MRV-8



BALL JOINT ADAPTER
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, GERADE
LÄNGE + HÖHE VARIABEL
+ BEFESTIGUNGSELEMENT

MRV-1F + MZZ-1Q*

* additional suitable adapters and clamping elements see page 2/24
* Weitere passende Adapter und Befestigungselemente siehe Seite 2/24

COOLEY



LEFT / LINKS

a x b	LENGTH / LÄNGE 240 mm
25 x 20 mm	MFV-9
25 x 25 mm	MFW-7
25 x 30 mm	MFW-0
25 x 35 mm	MFW-6
25 x 45 mm	MFW-5



RIGHT / RECHTS

a x b	LENGTH / LÄNGE 240 mm
25 x 20 mm	MFV-6
40 x 25 mm	MFW-4
40 x 30 mm	MFV-7
40 x 35 mm	MFW-3
40 x 45 mm	MFW-2
50 x 35 mm	MFV-8



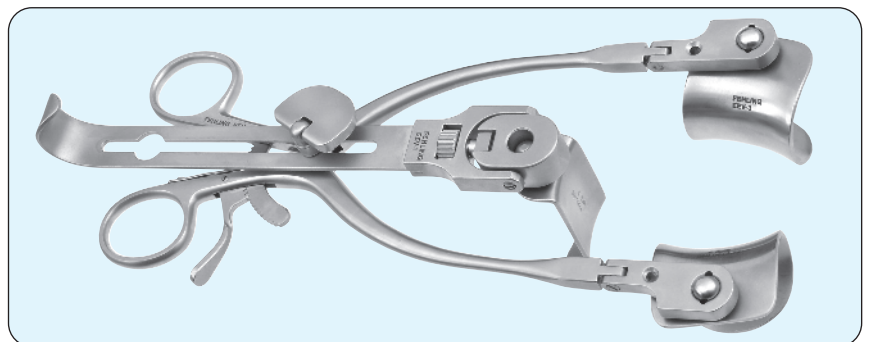
HOOK LENGTH
HAKENLÄNGE
9 mm

BLUNT
STUMPF

SHUNT RETRACTOR
SHUNTSPREIZER
70 mm
ECF-0



MAYO-ADAMS
RETRACTOR
WUNDSPREIZER
170 mm
ECG-7



exemplary configuration
Konfigurationsbeispiel

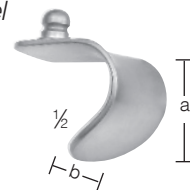


SPREADING WIDTH
SPREIZWEITE
MAX. 80 x 100 mm
210 mm

EEV-1



RETRACTING BLADES*
HALTEBLÄTTER*



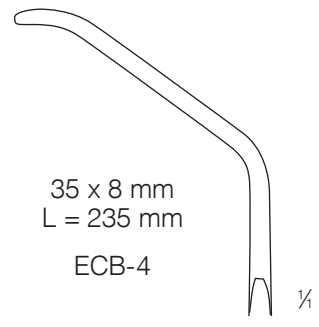
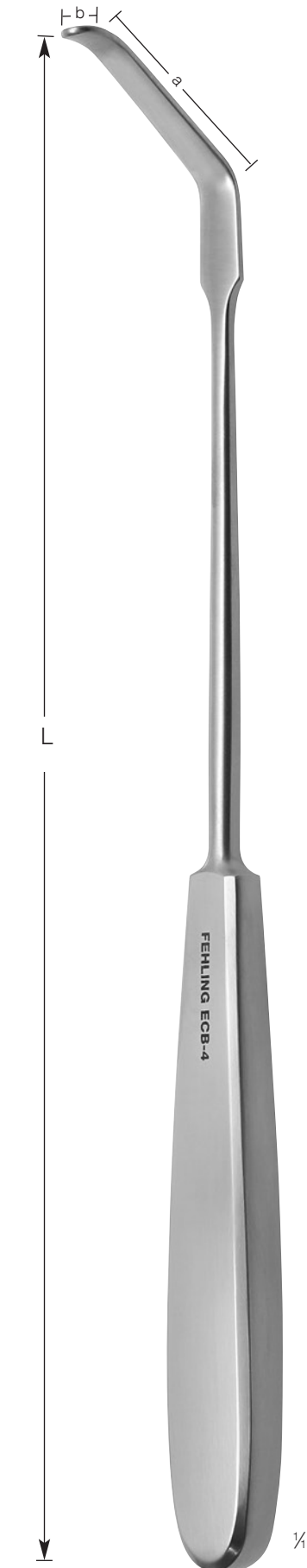
ROUX
RETRACTING BLADES*
HALTEBLÄTTER*

BLADE SIZE BLATTGRÖSSE a x b	
35 x 24 mm	MRE-5V
45 x 24 mm	MRE-6V
55 x 24 mm	MRE-7V

BLADE SIZE BLATTGRÖSSE a x b	
23 x 30 mm	EEV-2
28 x 38 mm	EEV-3
33 x 45 mm	EEV-4

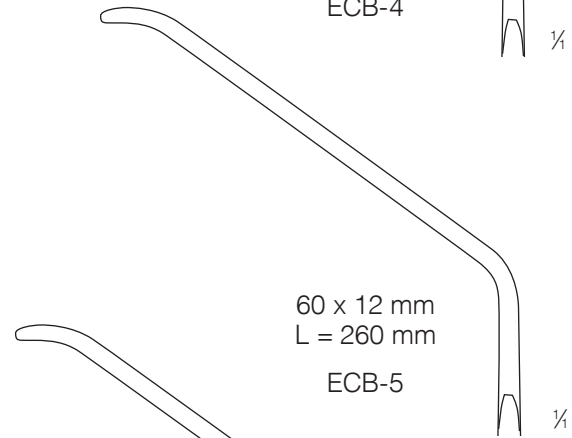
*auxiliary tool: blade ejector NGM-6 see page 2/39
*Hilfsmittel: Blattenferner NGM-6 siehe Seite 2/39

ZENKER



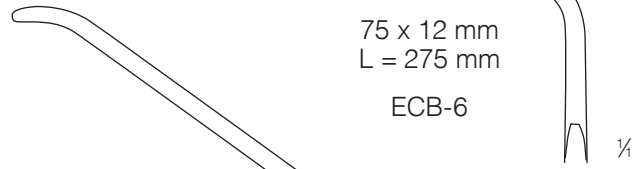
35 x 8 mm
L = 235 mm

ECB-4



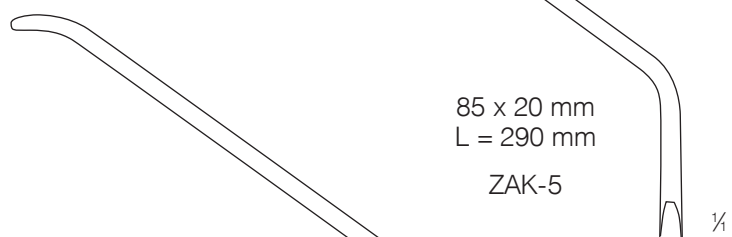
60 x 12 mm
L = 260 mm

ECB-5



75 x 12 mm
L = 275 mm

ECB-6



85 x 20 mm
L = 290 mm

ZAK-5

100 x 25 mm
L = 300 mm

ZAK-6

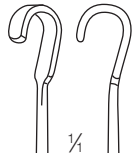
BLADE SIZE: DEPTH (a) x WIDTH (b)
BLATTGRÖSSE: TIEFE (a) x BREITE (b)

CERAMO®



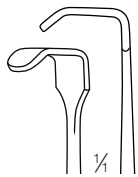
175 mm

ASD/VSD RETRACTOR
HERZDEFEKTHAKEN

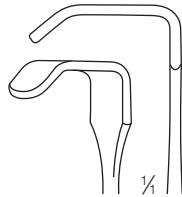


3 x 5 mm
EOB-7

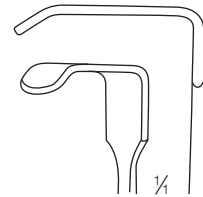
LANGENBECK



12 x 5 mm
EOB-1

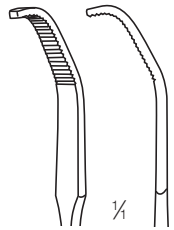


20 x 6 mm
EOB-2

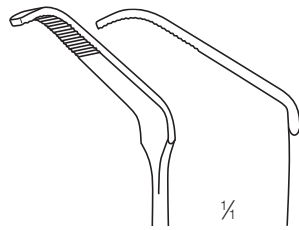


25 x 6 mm
EOB-3

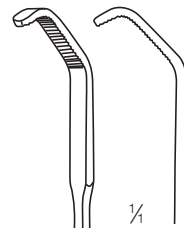
ZENKER



10 x 3 mm
EOB-5



25 x 3 mm
EOB-6



10 x 3 mm
(L=190 mm)
EOB-0

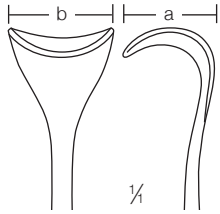
BLADE SIZE: DEPTH (a) x WIDTH (b)

BLATTGRÖSSE: TIEFE (a) x BREITE (b)

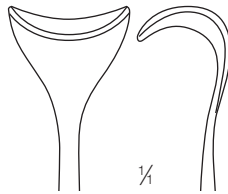
CERAMO®



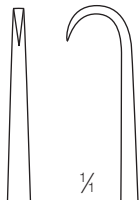
175 mm



12 x 14 mm
EOA-8



13 x 16 mm
EOA-9



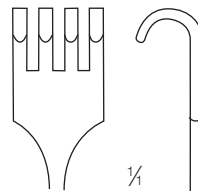
a = 7 mm
pointed / scharf
EOF-1



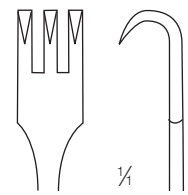
2 x 3 mm
pointed / scharf
EOA-1



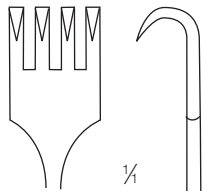
7 x 7 mm
pointed / scharf
EOA-3



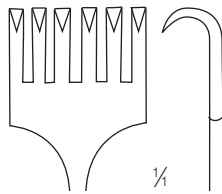
7 x 12 mm
blunt / stumpf
EOF-3



7 x 9 mm
pointed / scharf
EOF-2

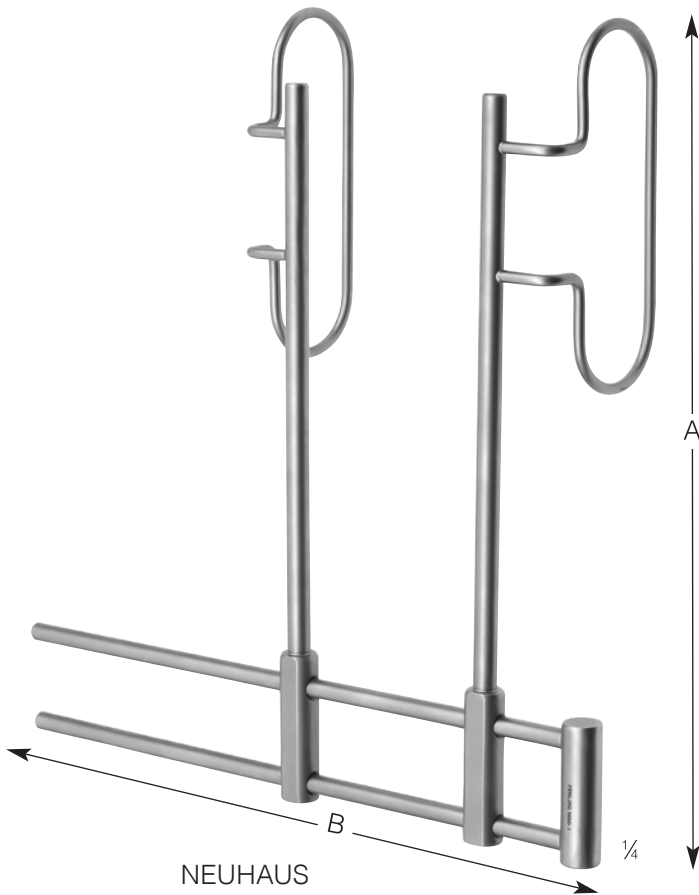


7 x 12 mm
pointed / scharf
EOF-4



7 x 18 mm
pointed / scharf
EOF-5

BLADE SIZE: DEPTH (a) x WIDTH (b) BLATTGRÖSSE: TIEFE (a) x BREITE (b)

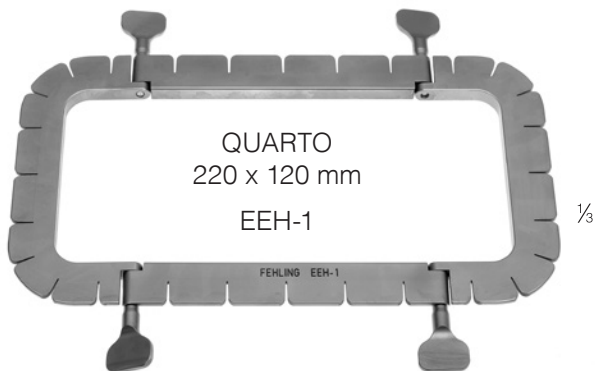


NEUHAUS
EXPLANATION RETRACTOR
ENTNAHMESPREIZER

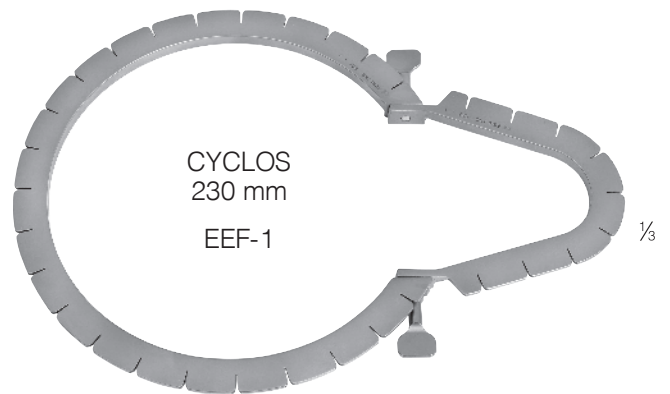
BODY SIZE RAHMENGRÖSSE A / B	SPREADING WIDTH SPREIZWEITE	
180 / 180 mm	150 mm	MSD-3
270 / 270 mm	240 mm	MSD-2
360 / 360 mm	330 mm	MSD-1

TITANIUM

SOFT TISSUE RETRACTORS
WEICHTEILRETRAKTOREN



QUARTO
220 x 120 mm
EEH-1

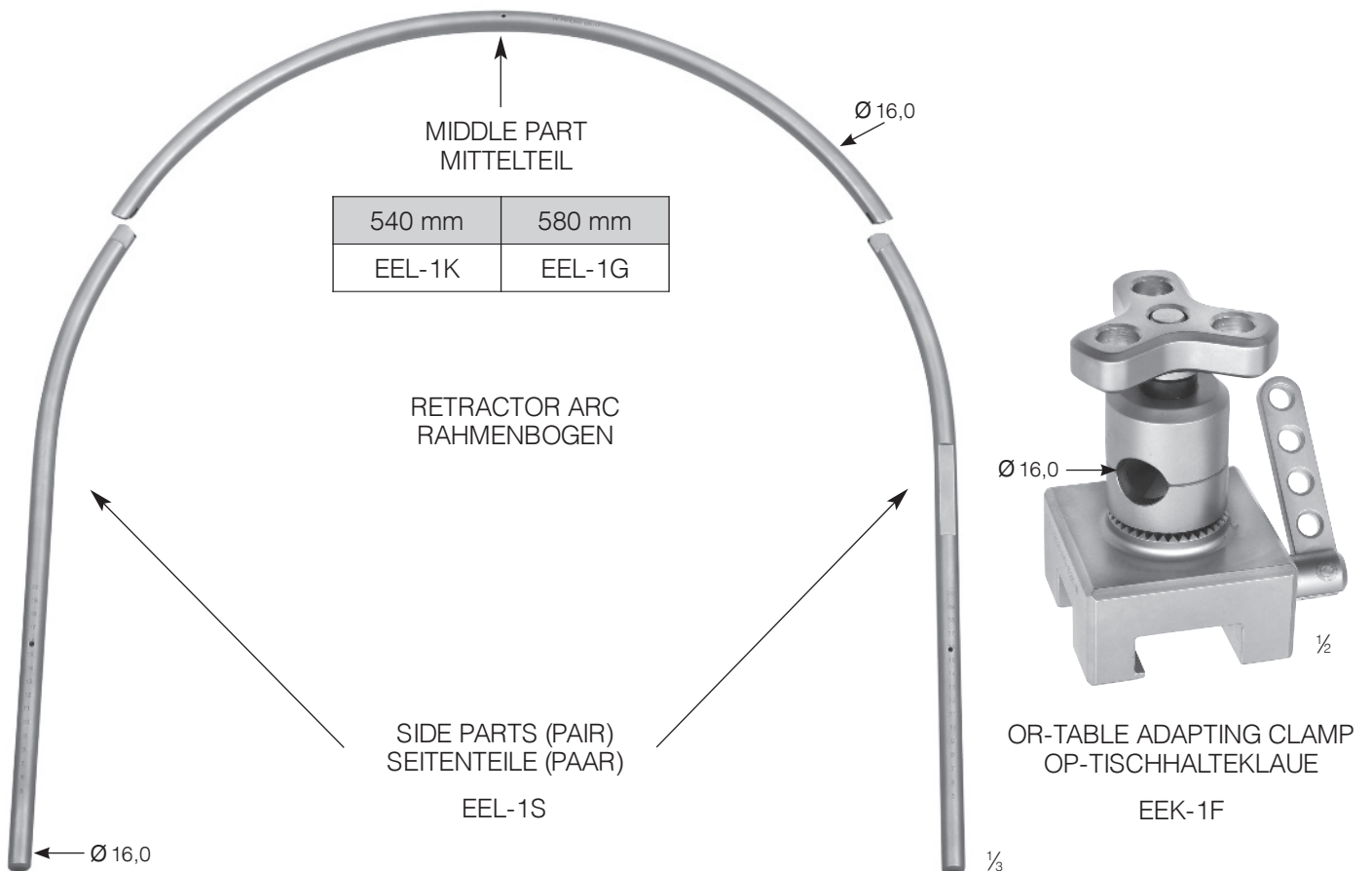


CYCLOS
230 mm
EEF-1

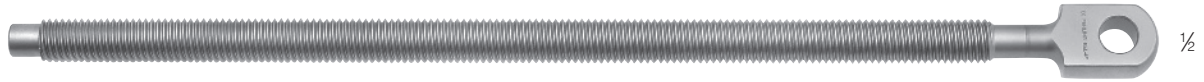
THOREXPO



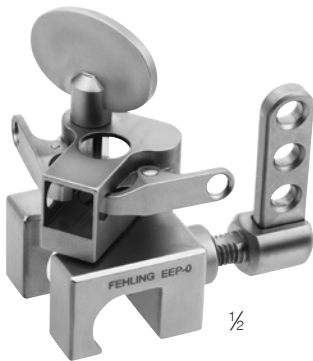
*exemplary configuration
Konfigurationsbeispiel*



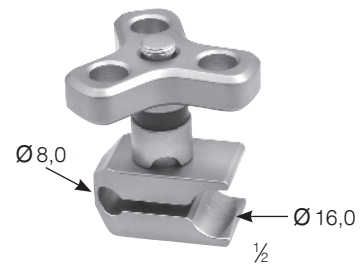
THOREXPO



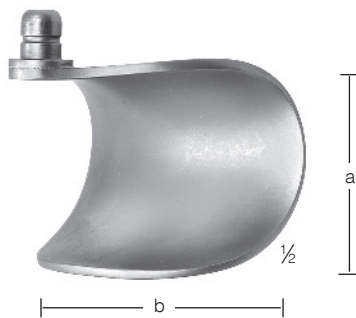
BLADE GUIDE
HAKENFÜHRUNG
300 mm
EEL-4F



COUPLING RIDER
VERBINDUNGSSCHLITTEN
EEP-0

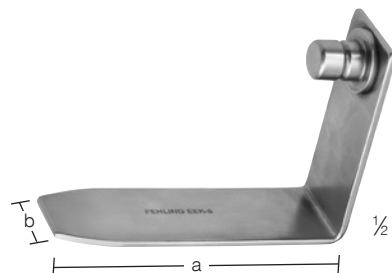


CROSS LINK
KREUZVERBINDER
EEM-2F



RETRACTING BLADE
HALTEBLATT

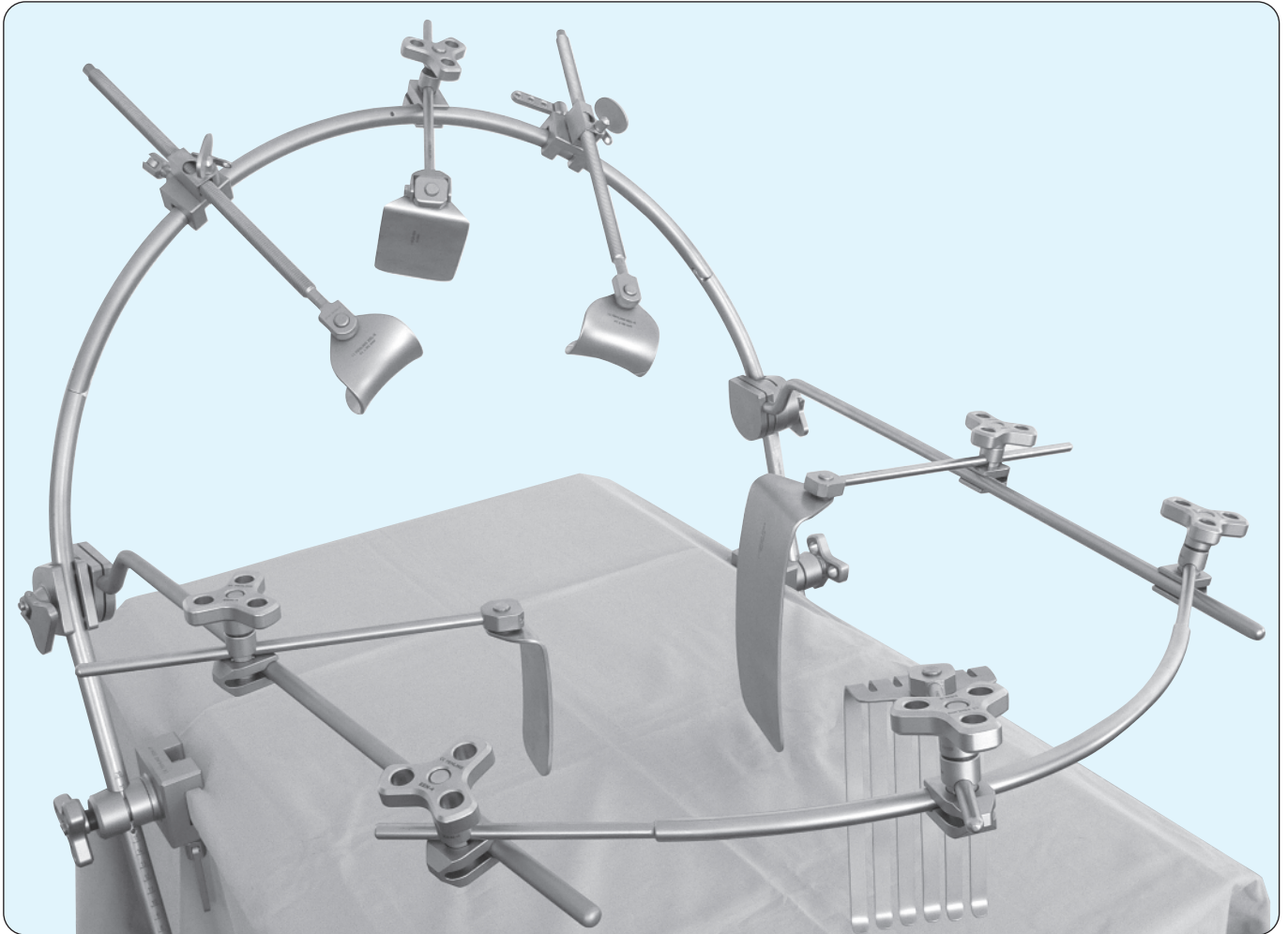
BLADE SIZE BLATTGRÖSSE a x b	
41 x 44 mm	EEL-5
41 x 60 mm	EEL-6
46 x 75 mm	EEL-7
65 x 85 mm	EEL-8
85 x 85 mm	EEL-9
90 x 130 mm	EEM-1



MANUBRIUM HOOK
MANUBRIUM HAKEN

BLADE SIZE BLATTGRÖSSE a x b	
75 x 19 mm	EEK-5
75 x 24 mm	EEK-8
95 x 24 mm	EEK-6
95 x 30 mm	EEK-7

VENTREXPO

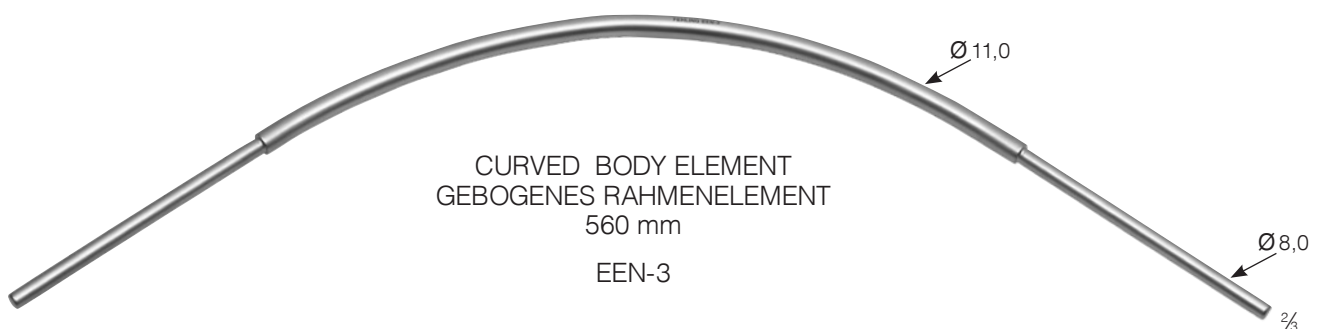


*exemplary configuration
Konfigurationsbeispiel*



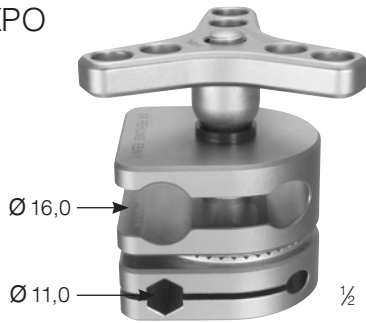
BAYONET-SHAPED BODY ELEMENT
BAYONETT FÖRMIGES RAHMENELEMENT

LENGTH LÄNGE	
420 mm	EEN-2K
570 mm	EEN-2V



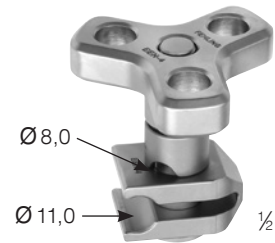
CURVED BODY ELEMENT
GEBOGENES RAHMENELEMENT
560 mm
EEN-3

VENTREXPO



CROSS LINK 16/11 (THOREXPO ARC)
KREUZVERBINDER 16/11 (THOREXPO-BOGEN)

EEN-1



CROSS LINK 11/8 (BLADE GUIDE)
KREUZVERBINDER 11/8 (HAKENFÜHRUNG)

EEN-4



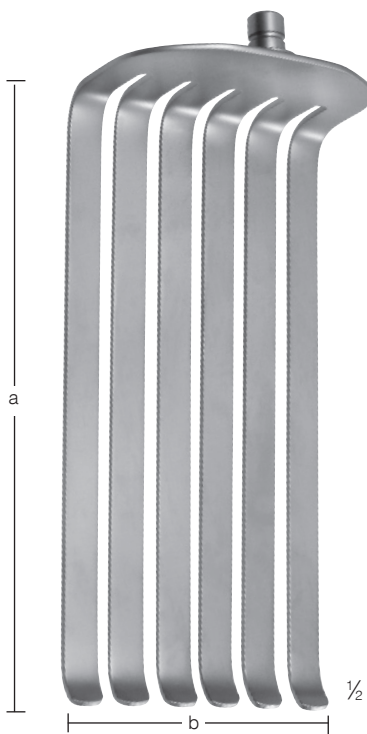
BLADE GUIDE WITH ADJUSTABLE ANGLE
WINKELVERSTELLBARE HAKENFÜHRUNG

LENGTH / LÄNGE	
260 mm	EEN-7
450 mm	EEK-9



BLADE GUIDE / HAKENFÜHRUNG

LENGTH / LÄNGE	
180 mm	EEN-6
260 mm	EEN-5



INTESTINAL RAKE, MALLEABLE
INTESTINALFÄCHER, BIEGSAM
(a) 160 x (b) 80 (-120) mm

EEM-6



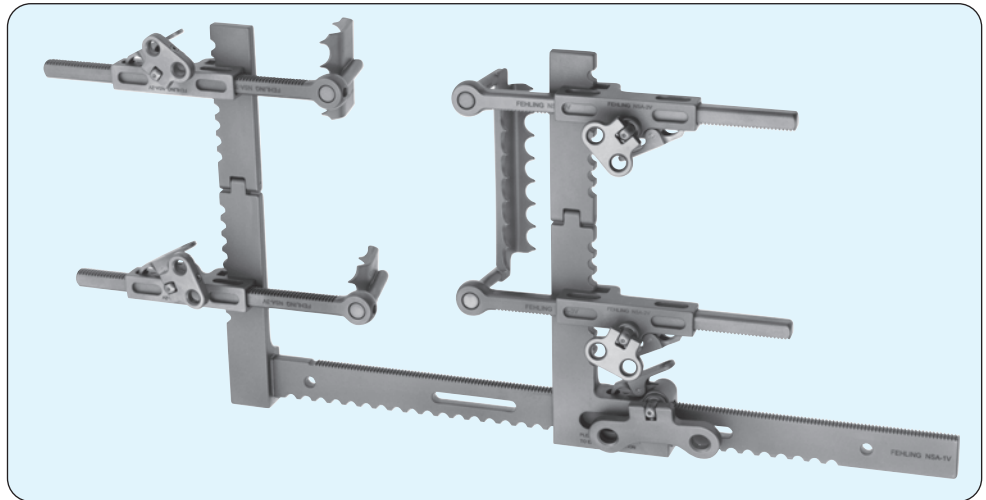
ABDOMINAL SPATULAS
BAUCHSPATEL

BLADE SIZE BLATTGRÖSSE a x b	
180 x 50 mm	EEN-8
130 x 65 mm	EEN-9
150 x 50 mm	EEM-8
150 x 65 mm	EEN-0
150 x 120 mm	EEO-5
180 x 65 mm	EEO-6
180 x 80 mm MALLEABLE/BIEGSAM	EEM-5

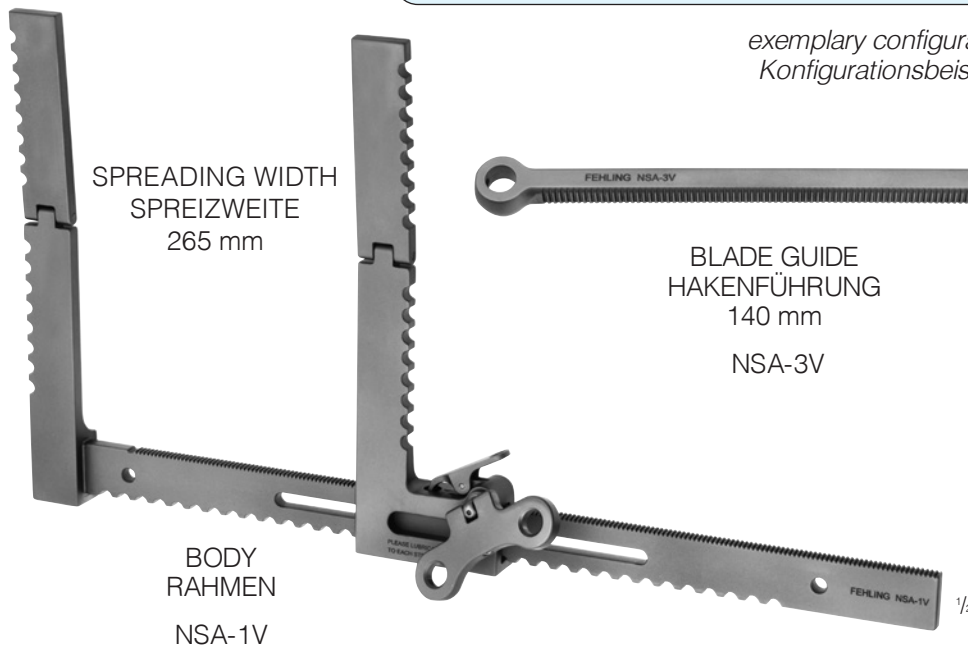
**POLYTEL
TITANIUM**

COMPONENTS / KOMPONENTEN

See retracting blades for POLYTEL on pages 2/41, 2/42
Halteblätter für POLYTEL auf den Seiten 2/41, 2/42



*exemplary configuration
Konfigurationsbeispiel*



SPREADING WIDTH
SPREIZWEITE
265 mm

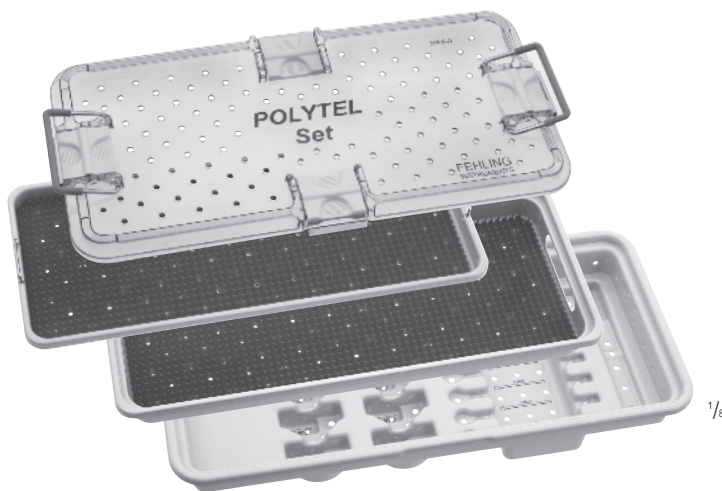
BODY
RAHMEN
NSA-1V



BLADE GUIDE
HAKENFÜHRUNG
140 mm
NSA-3V



COUPLING RIDER
FIXIERSCHLITTEN
NSA-2V



POLYTEL
STERILISATION AND STORAGE TRAY
STERILISIER- UND LAGERCONTAINER
530 x 250 x 100 mm

NSX-0



BODY JOINT STABILIZER
RAHMENGELENKSTABILISATOR
NSA-5



BLADE EJECTOR
BLATTENTFERNER
115 mm
NGM-6

ATLAS

CERVICAL RETRACTOR
HWS-SPREIZER

See retracting blades for ATLAS on pages 2/41, 2/42
Halteblätter für ATLAS auf den Seiten 2/41, 2/42



SPREADING
WIDTH
SPREIZWEITE
85 mm

LONGITUDINAL
LÄNGSVERSION

NHL-1



SPREADING
WIDTH
SPREIZWEITE
65 mm

TRANSVERSAL
QUERVERSION

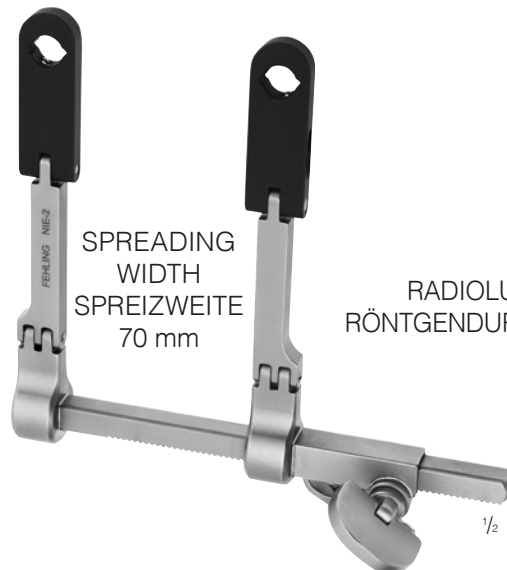
NHK-9



SPREADING
WIDTH
SPREIZWEITE
85 mm

PEEK CONNECTION ELEMENTS, RADIOLUCENT
PEEK ENDGLIEDER, RÖNTGENDURCHLÄSSIG

NIE-1



SPREADING
WIDTH
SPREIZWEITE
70 mm

PEEK CONNECTION ELEMENTS, RADIOLUCENT
PEEK ENDGLIEDER, RÖNTGENDURCHLÄSSIG

NIE-2

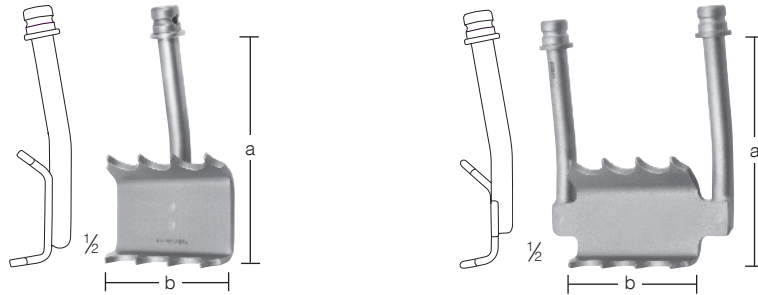


PEEK
RADIOLUCENT HANDLE
RÖNTGENDURCHLÄSSIGER GRIFF
NIG-1

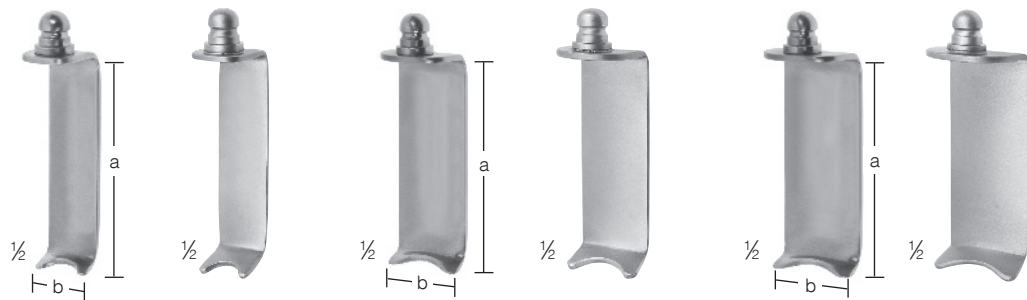
POLYTEL/ATLAS
TITANIUM

RETRACTING BLADES / HALTEBLÄTTER*

PARAFASCIAL BLADES
PARAFASCIAL-BLÄTTER



DEPTH TIEFE ^a	ROTATABLE / DREHBAR		FIXED / STARR	
	b = 25 mm	b = 40 mm	b = 40 mm	b = 80 mm
40 mm	NSS-6	NSM-6	NSO-6	NSP-6
60 mm	NSS-7	NSM-7	NSO-7	NSP-7
80 mm	NSS-8	NSM-8	NSO-8	NSP-8
100 mm	NSS-9	NSM-9	NSO-9	NSP-9
120 mm	NSU-9	NST-9	-	NSK-8
140 mm	NSS-0	-	-	-



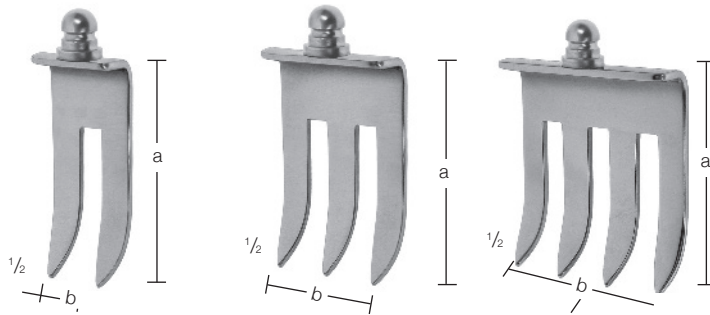
DEPTH TIEFE ^a	WIDTH / BREITE ^b					
	15 mm		20 mm		24 mm	
	POINTED SCHARF	BLUNT STUMPF	POINTED SCHARF	BLUNT STUMPF	POINTED SCHARF	BLUNT STUMPF
20 mm	-	NSR-8	-	-	-	-
25 mm	-	NSR-9	NSL-8	NST-8	NSF-8	NSG-9
30 mm	NSO-0	NSN-0	NSP-0	-	NSM-0	NSH-8
35 mm	NSB-0	NSN-1	NSL-0	NST-0	NSF-0	NSH-0
40 mm	NSO-1	NSN-2	NSP-1	NSY-5	NSM-1	NSH-9
45 mm	NSB-1	NSN-3	NSL-1	NST-1	NSF-1	NSH-1
50 mm	NSO-2	NSN-4	NSP-2	NSY-6	NSM-2	NSQ-8
55 mm	NSB-2	NSN-5	NSL-2	NST-2	NSF-2	NSH-2
60 mm	NSO-3	NSN-6	NSP-3	NSQ-7	NSM-3	NSQ-9
65 mm	NSB-3	NSN-7	NSL-3	NST-3	NSF-3	NSH-3
70 mm	NSO-4	NSN-8	NSP-4	-	NSM-4	NSQ-0
75 mm	NSB-4	NSN-9	NSL-4	NST-4	NSF-4	NSH-4
80 mm	NSO-5	-	-	-	NSM-5	-
85 mm	NSB-5	-	-	NST-5	NSF-5	NSH-5
95 mm	NSB-6	-	-	NST-6	NSF-6	NSH-6
105 mm	NSB-7	-	-	NST-7	NSF-7	NSH-7

*auxiliary tool: blade ejector NGM-6 see page 2/39

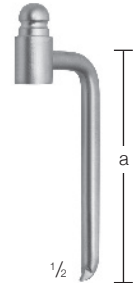
*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/39

POLYTEL/ATLAS
TITANIUM

RETRACTING BLADES / HALTEBLÄTTER*

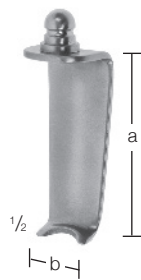


SPINOUS PINS
WIRBELDORNE

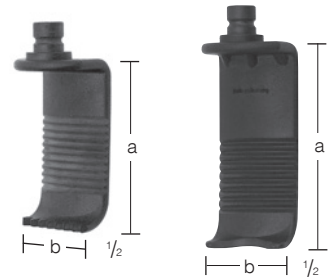


POINTED / SCHARF			
WIDTH / BREITE b			
DEPTH TIEFE a	24 mm	40 mm	56 mm
25 mm	-	NSI-8	-
35 mm	-	NSI-0	NSK-0
45 mm	NSR-1	NSI-1	-
55 mm	NSR-2	NSI-2	-
65 mm	NSR-3	NSI-3	-
75 mm	-	NSI-4	-
85 mm	-	NSI-5	NSK-5
95 mm	NSR-6	NSI-6	-
105 mm	NSR-7	NSI-7	-

DEPTH TIEFE a	
25 mm	NSC-8
30 mm	NSC-9
35 mm	NSC-1
40 mm	NSC-2
45 mm	NSC-3
50 mm	NSC-4
55 mm	NSC-5
65 mm	NSC-6



PEEK
RADIOLUCENT
RÖNTGENDURCHLÄSSIG



CONIC / KONISCH	
WIDTH / BREITE b	
DEPTH TIEFE a	15 mm
35 mm	NSG-0
45 mm	NSG-1
55 mm	NSG-2
65 mm	NSG-3
75 mm	NSG-4
85 mm	NSG-5
95 mm	NSG-6
105 mm	NSG-7

DEPTH TIEFE a	POINTED SCHARF	BLUNT STUMPF
	b = 23 mm	
40 mm	NIE-4	NIF-2
45 mm	NIE-5	NIF-3
50 mm	NIE-6	NIF-4
55 mm	NIE-7	NIF-5
60 mm	NIE-8	NIF-6
65 mm	NIE-9	NIF-7
75 mm	NIF-0	NIF-8
85 mm	-	NIG-3
95 mm	-	NIG-4

*auxiliary tool: blade ejector NGM-6 see page 2/39

*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/39

ATLAS SIDE LOAD

CERVICAL SPINE RETRACTOR
HWS-SPREIZER



SPREADING
WIDTH
SPREIZ-
WEITE
85 mm

LONGITUDINAL
LÄNGSVERSION

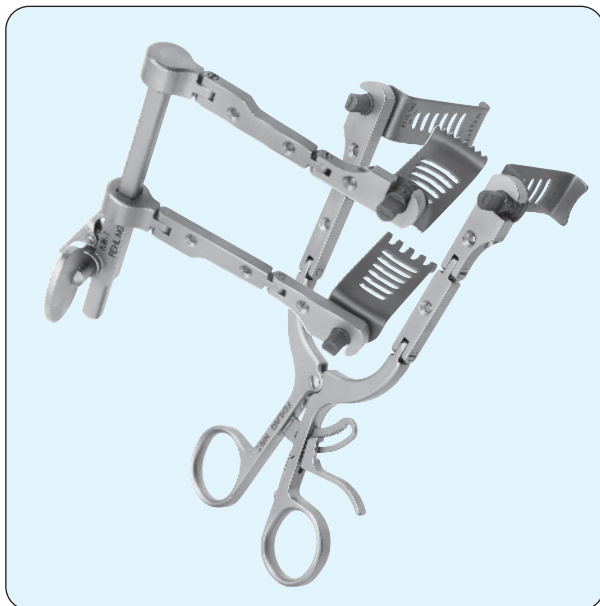
NIN-2



SPREADING
WIDTH
SPREIZWEITE
65 mm

TRANSVERSAL
QUERVERSION

NIN-1



*exemplary configuration
Konfigurationsbeispiel*

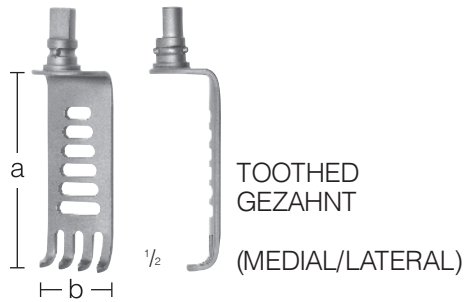


HANDLE
HANDGRIFF

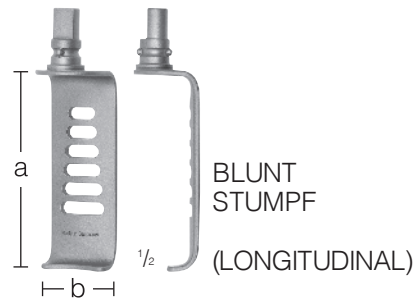
NIN-3K

ATLAS SIDE LOAD
TITANIUM

BLADES
BLÄTTER



DEPTH TIEFE a	WIDTH BREITE b 19 mm
25 mm	NII-1
30 mm	NII-2
35 mm	NII-3
40 mm	NII-4
45 mm	NII-5
50 mm	NII-6
55 mm	NII-7
60 mm	NII-8

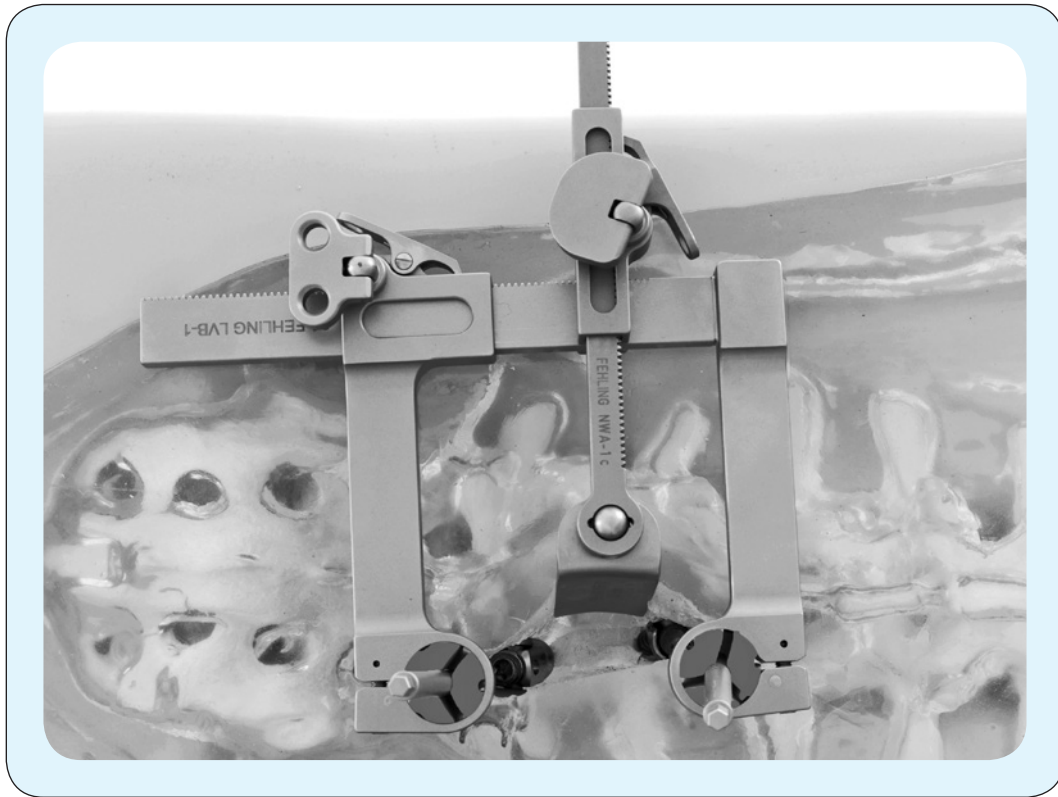


DEPTH TIEFE a	WIDTH BREITE b	
	19 mm	24 mm
25 mm	NIJ-1	-
30 mm	NIJ-2	-
35 mm	NIJ-3	NIM-1
40 mm	NIJ-4	NIM-2
45 mm	NIJ-5	NIM-3
50 mm	NIJ-6	NIM-4
55 mm	NIJ-7	NIM-5
60 mm	NIJ-8	NIM-6
65 mm	-	NIM-7
70 mm	-	NIM-8
75 mm	-	NIM-9

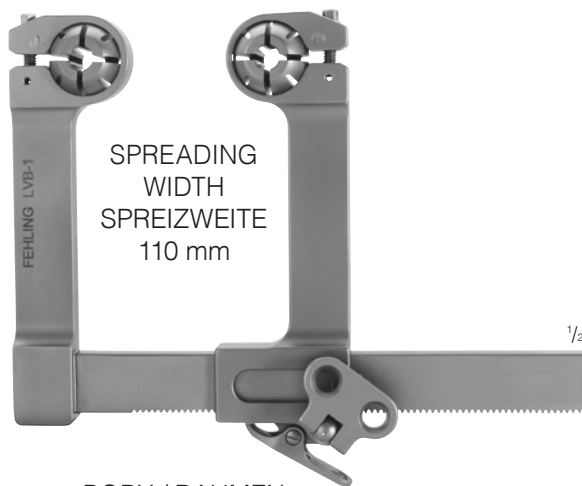


DEPTH TIEFE a	WIDTH BREITE b 24 mm
30 mm	NIK-1
35 mm	NIK-2
40 mm	NIK-3
45 mm	NIK-4
50 mm	NIK-5
55 mm	NIK-6
60 mm	NIK-7
65 mm	NIK-8
70 mm	NIK-9

MI TLIF MULTIFUNCTIONAL RETRACTOR
MI TLIF MULTIFUNKTIONSSPREIZER



exemplary configuration
Beispielkonfiguration



SPREADING
WIDTH
SPREIZWEITE
110 mm

BODY / RAHMEN
LVB-1



COUPLING RIDER
FIXIERSCHLITTEN
NWA-1B



MEDIAL BLADE
MEDIALES BLATT

DEPTH TIEFE a	WIDTH BREITE b
50 mm	LVB-5
65 mm	LVB-6
80 mm	LVB-7
95 mm	LVB-8



BLADE GUIDE
HAKENFÜHRUNG
NWA-1C



MI PARAFASCIAL BLADE, LEFT
MI PARAFASCIALBLATT, LINKS

	- a - WIDTH PEDICEL SCREW RETAINER BREITE PEDIKELSCHRAUBEN AUFNAHME
LVB-3	11 mm
LVB-3A	12,2 mm



MI PARAFASCIAL BLADE, RIGHT
MI PARAFASCIALBLATT, RECHTS

	- a - WIDTH PEDICEL SCREW RETAINER BREITE PEDIKELSCHRAUBEN AUFNAHME
LVB-4	11 mm
LVB-4A	12,2 mm



MI MICRO BLADE
MI MIKROBLATT

	- a - WIDTH PEDICEL SCREW RETAINER BREITE PEDIKELSCHRAUBEN AUFNAHME
LVB-2	11 mm
LVB-2A	12,2 mm

ACCESSORIES
ZUBEHÖR



CARDAN SCREWDRIVER
KARDAN SCHRAUBENZIEHER
LMT-4



CERAMO®
HEXAGONAL WRENCH
SECHSKANTSCHLÜSSEL
NVG-9



HEXAGONAL WRENCH (LONG)
SECHSKANTSCHLÜSSEL (LANG)
NVG-9L

CASPAR

INTERVERTEBRAL RETRACTOR SYSTEM
INTERVERTEBRALES SPREIZERSYSTEM

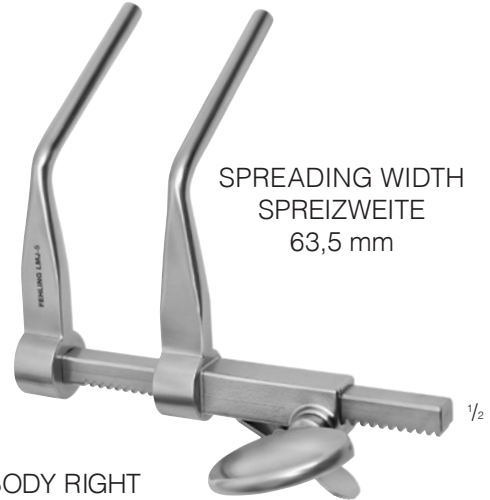
SPREADING WIDTH
SPREIZWEITE
63,5 mm



BODY LEFT
RAHMEN LINKS

LMJ-6

SPREADING WIDTH
SPREIZWEITE
63,5 mm



BODY RIGHT
RAHMEN RECHTS

LMJ-5



DISTRACTION SCREW
DISTRAKTIONSSCHRAUBE

THREAD LENGTH GEWINDELÄNGE	
12 mm	NGN-0
14 mm	LMJ-8
16 mm	LMJ-9
18 mm	NGN-5



SCREW DRIVER
SCHRAUBENDREHER

LMK-1

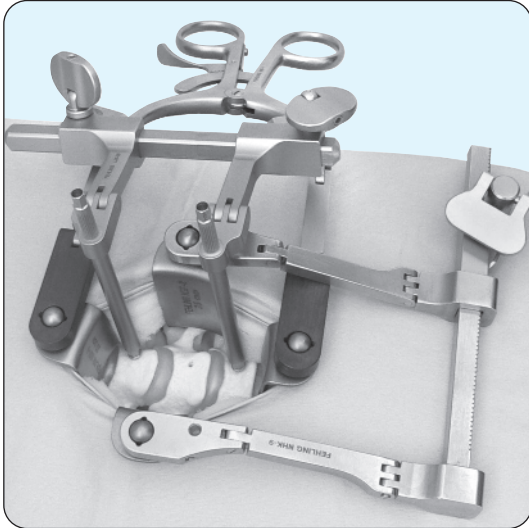


DRILL GUIDE FOR
DISTRACTION SCREW
BOHRLEHRE FÜR
DISTRAKTIONSSCHRAUBE

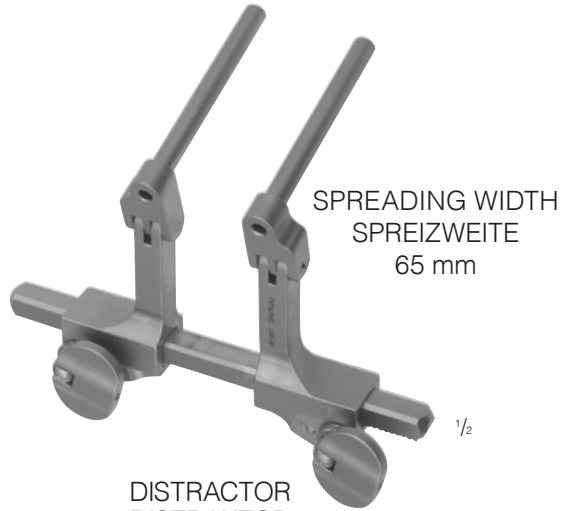
LEFT LINKS	RIGHT RECHTS
NGM-7K	NGM-8K

CONCEPT

INTERVERTEBRAL DISTRACTOR SYSTEM
INTERVERTEBRALES SPREIZERSYSTEM



*exemplary configuration
Konfigurationsbeispiel*



SPREADING WIDTH
SPREIZWEITE
65 mm

DISTRACTOR
DISTRAKTOR

LMI-9F



LOCK NUT FOR PIN
FIXIERMUTTER FÜR PIN

LMJ-0F

DISTRACTION PINS
DISTRAKTIONSPINS

THREAD LENGTH GEWINDELÄNGE	
12 mm	LMI-3F
14 mm	LMI-4F
16 mm	LMI-5F
18 mm	LMH-0F



PIN DRIVER
PINDREHER

LMI-6F



PARALLEL DISTRACTOR
INTERVERTEBRALSPREIZZANGE

LMI-8F

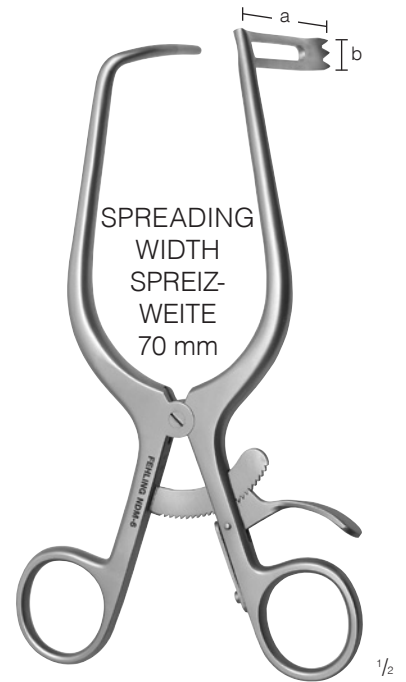


LEFT TYPE
LINKSMODELL

170 mm

SCHULL
MICRO DISCECTOMY RETRACTOR
MIKRODISKEKTOMIESPREIZER

BLADE SIZE BLATTGRÖSSE a x b	LEFT LINKS	RIGHT RECHTS
40 x 10 mm	NDM-1	NDM-2
50 x 10 mm	NDM-3	NDM-4
60 x 10 mm	NDM-5	NDM-6
70 x 10 mm	NDM-7	NDM-8
50 x 20 mm	NDP-1	NDP-2
60 x 20 mm	NDP-3	NDP-4
70 x 20 mm	NDP-5	NDP-6



RIGHT TYPE
RECHTSMODELL

170 mm

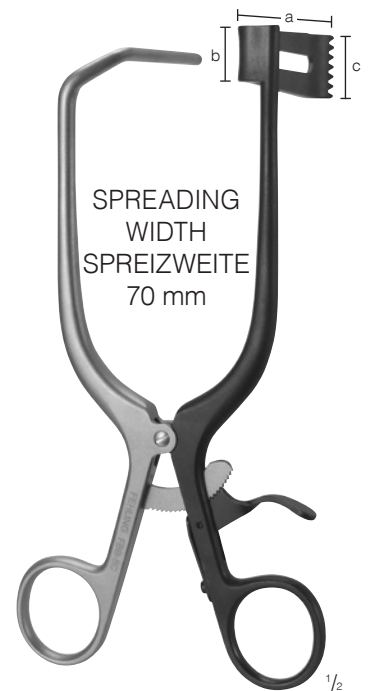


LEFT TYPE
LINKSMODELL

180 mm

CERAMO® FEIGL
MICRO DISCECTOMY RETRACTOR
MIKRODISKEKTOMIESPREIZER

BLADE SIZE BLATTGRÖSSE a x b/c	LEFT TYPE LINKS	RIGHT TYPE RECHTS
40 x 10/15 mm	FBA-1C	FBB-1C
50 x 10/15 mm	FBA-2C	FBB-2C
60 x 10/15 mm	FBA-3C	FBB-3C
70 x 15/20 mm	FBA-4C	FBB-4C
80 x 15/20 mm	FBA-5C	FBB-5C
90 x 20/25 mm	FBA-6C	FBB-6C
100 x 20/25 mm	FBA-7C	FBB-7C



RIGHT TYPE
RECHTSMODELL

180 mm

All patterns also available in full CERAMO® coating.
Alle Modelle auch in kompletter CERAMO®-Be-
schichtung erhältlich.



BLADE SIZE BLATTGRÖSSE a x b	
50 x 10 mm	NDQ-8
60 x 10 mm	NDQ-6
70 x 10 mm	NDQ-7
80 x 10 mm	NDQ-9

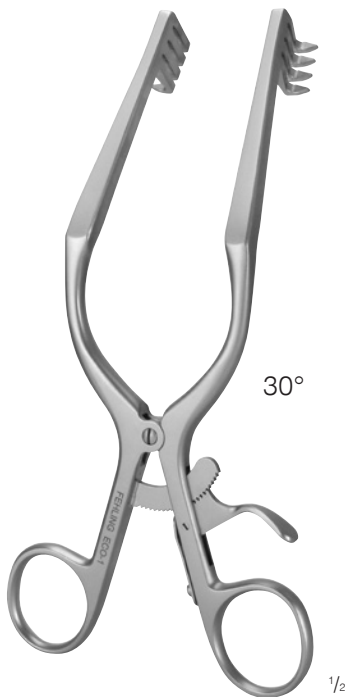
FOR TRANSMUSCULAR ACCESS
FÜR TRANSMUSKULÄREN ZUGANG

WINKING

170 mm

SPREADING WIDTH
SPREIZWEITE

85 mm



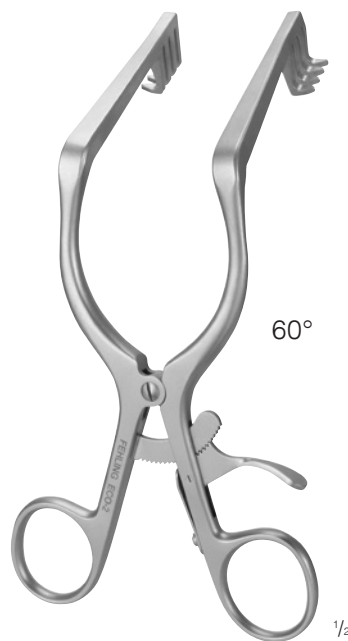
30°

190 mm

SPREADING WIDTH
SPREIZWEITE

90 mm

ECO-1



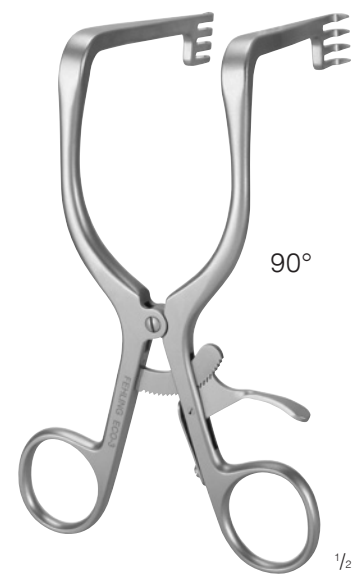
60°

170 mm

SPREADING WIDTH
SPREIZWEITE

85 mm

ECO-2



90°

150 mm

SPREADING WIDTH
SPREIZWEITE

80 mm

ECO-3

CERAMO® CONCEPT

MICRO DISCECTOMY SPECULUM
MIKRODISKEKTOMIESPEKULUM



*exemplary configuration
Konfigurationsbeispiel*



SPECULUM
SPEKULUM

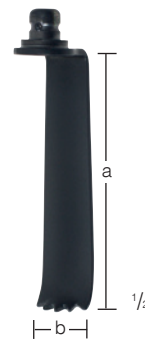
DEPTH TIEFE	
35 mm	NVK-5V
45 mm	NVH-1V
55 mm	NVH-2V
65 mm	NVH-3V
75 mm	NVH-4V
85 mm	NVH-5V
95 mm	NVH-6V
105 mm	NVJ-7
115 mm	NVJ-8



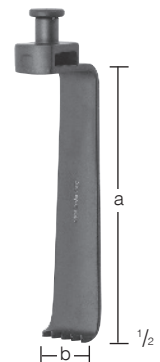
COUNTER RETRACTOR
GEGENSPERRER

NVH-9V

BLADES FOR COUNTER RETRACTOR*
BLÄTTER FÜR GEGENSPERRER*



LATERAL



MEDIAL

DEPTH TIEFE	a	b = 15 mm
35 mm		NVK-6V
40 mm		NVI-0V
45 mm		NVI-1V
50 mm		NVI-6V
55 mm		NVI-2V
60 mm		NVI-7V
65 mm		NVI-3V
75 mm		NVI-4V
85 mm		NVI-5V
95 mm		NVI-8V
105 mm		NVJ-0
115 mm		NVK-9

DEPTH TIEFE	a	b = 15 mm
35 mm		NVW-0
40 mm		NVW-1
45 mm		NVW-2
50 mm		NVW-3
55 mm		NVW-4
60 mm		NVW-5
65 mm		NVW-6
70 mm		NVW-7

*auxiliary tool: blade ejector NGM-6
see page 2/39

*Hilfsmittel: Blättentferner NGM-6
siehe Seite 2/39

CERAMO® CONCEPT

ACCESSORIES FOR MICRO DISCECTOMY SPECULUM
ZUBEHÖR FÜR MIKRODISKEKTOMIESPEKULUM



HEXAGONAL WRENCH (LONG)
SECHSKANTSCHLÜSSEL (LANG)

NVG-9L



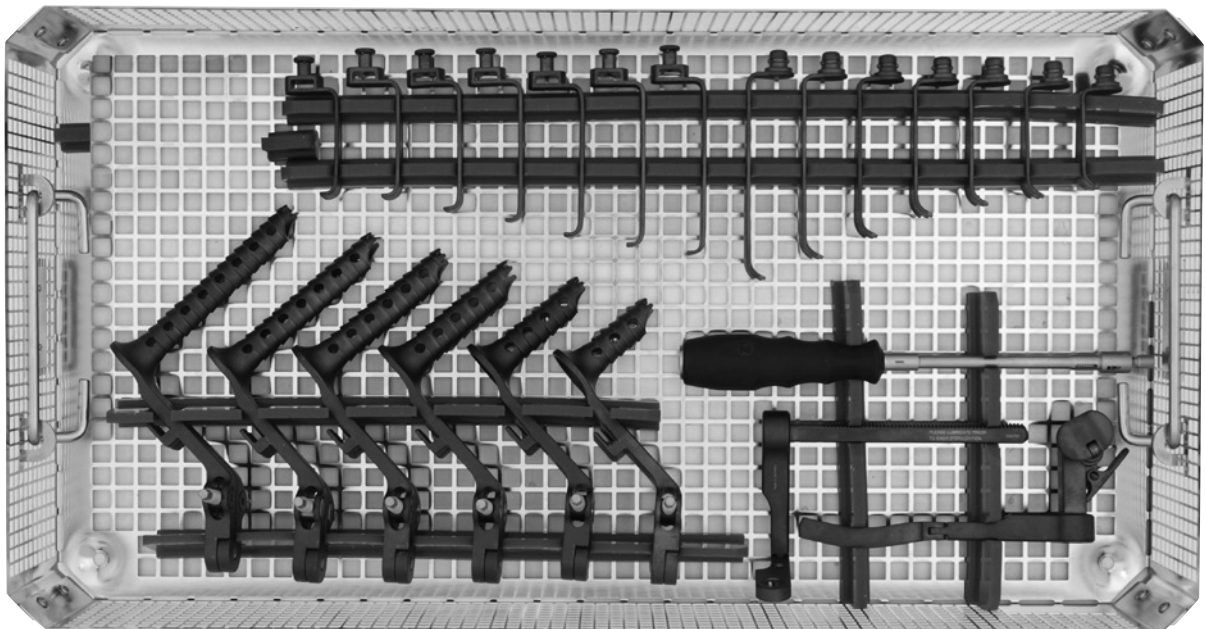
CARDAN SCREWDRIVER
KARDAN SCHRAUBENZIEHER

LMT-4



HEXAGONAL WRENCH
FOR SPECULUM
SECHSKANTSCHLÜSSEL
FÜR SPEKULUM

NVG-9



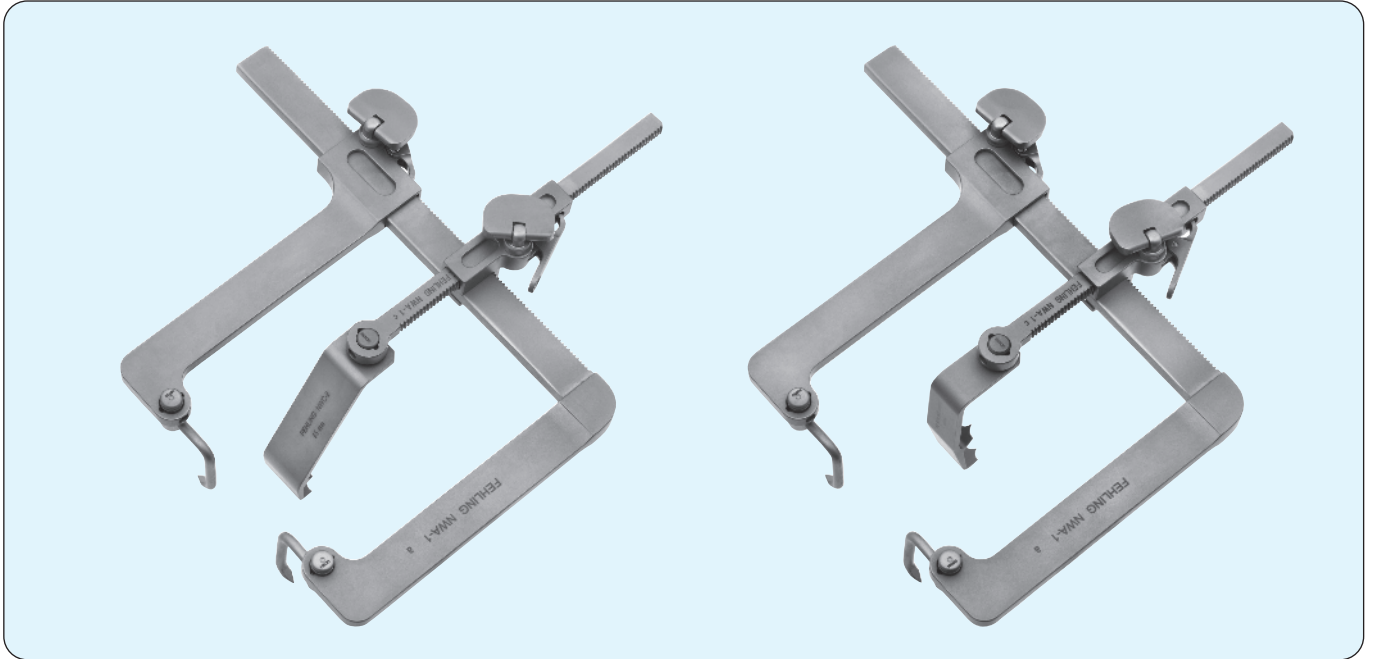
STERILIZATION AND STORAGE TRAY*
STERILISIER- UND LAGERCONTAINER*
480 x 250 x 70 mm

NVH-0V

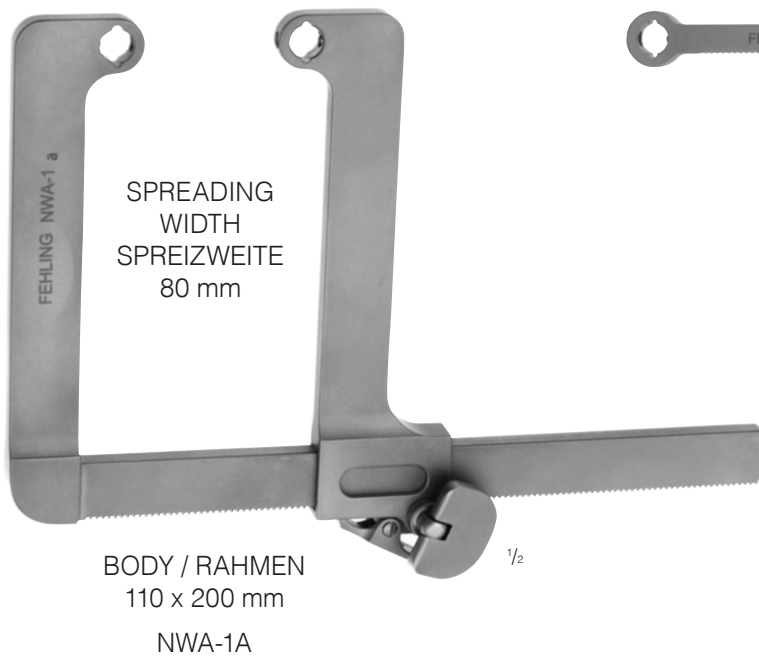
*(DELIVERY WITHOUT CONTENT)
*(LIEFERUNG OHNE INHALT)

RAABE
TITANIUM

HEMI-LAMINECTOMY RETRACTOR
HEMILAMINEKTOMIESPREIZER



*exemplary configuration
Konfigurationsbeispiel*



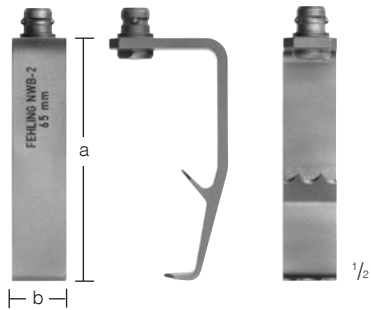
BLADEGUIDE
HAKENFÜHRUNG
NWA-1B



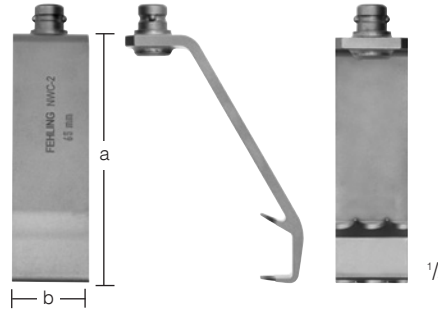
COUPLING RIDER
FIXIERSCHLITTEN
NWA-1B

RAABE
TITANIUM

HEMI-LAMINECTOMY RETRACTOR
HEMILAMINEKTOMIESPREIZER



MUSCLE BLADES*
MUSKELBLÄTTER*



„CROSS-OVER“
MUSCLE BLADES*
MUSKELBLÄTTER*



CRANIAL-CAUDAL PINS (PAIR)*
CRANIAL-CAUDAL SPREIZPINS (PAAR)*

BLADE SIZE BLATTGRÖSSE a x b	
50 x 15 mm	NWB-1
65 x 15 mm	NWB-2
80 x 15 mm	NWB-3
95 x 15 mm	NWB-4
50 x 30 mm	NWB-5
65 x 30 mm	NWB-6
80 x 30 mm	NWB-7
95 x 30 mm	NWB-8

BLADE SIZE BLATTGRÖSSE a x b	
50 x 20 mm	NWC-1
65 x 20 mm	NWC-2
80 x 20 mm	NWC-3
95 x 20 mm	NWC-4

DEPTH TIEFE a	
35 mm	NWA-2
45 mm	NWA-3
55 mm	NWA-4

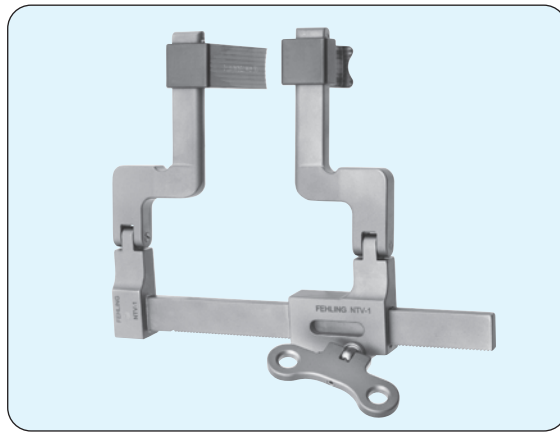
*auxiliary tool: blade ejector NGM-6 see page 2/39
*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/39



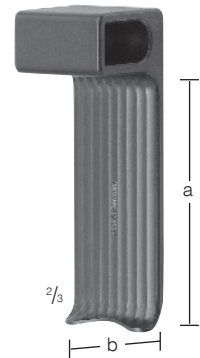
STERILISATION AND STORAGE TRAY
STERILISIER- UND LAGERCONTAINER
400 x 260 x 50 mm

NWA-0

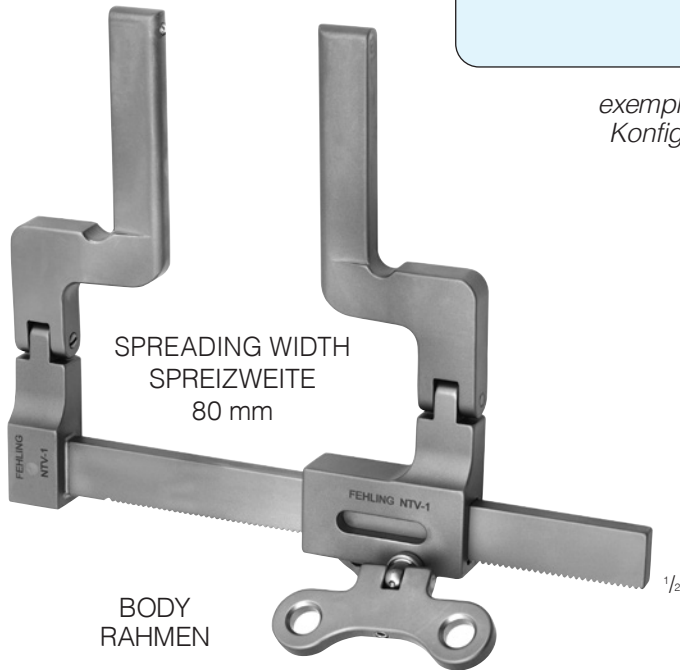
DOERNER
TITANIUM



exemplary configuration
Konfigurationsbeispiel



CERAMO®
BLADES (PAIR)
BLÄTTER (PAAR)



FOR 1-2 SEGMENTS
FÜR 1-2 SEGMENTE


NTV-1

FOR 1-4 SEGMENTS
FÜR 1-4 SEGMENTE

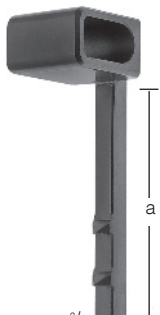
NTV-0

DEPTH LÄNGE a	WIDTH / BREITE b	
	20 mm	30 mm
40 mm	NTT-0	NTT-6
50 mm	NTT-1	NTT-7
60 mm	NTT-2	NTT-8
70 mm	NTT-3	NTT-9
80 mm	NTT-4	NTU-0
100 mm	NTT-5	NTU-1
120 mm	NTU-3	NTU-2

CERAMO®
SPINOUS PINS
WIRBELDORNE



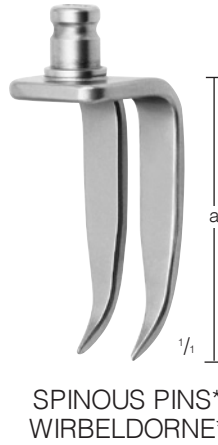
DEPTH TIEFE a	
20 mm	NTR-9
30 mm	NTS-0
40 mm	NTS-1
50 mm	NTS-2
60 mm	NTS-4
70 mm	NTS-6
80 mm	NTS-8



DEPTH TIEFE a	
30 mm	NTV-2
40 mm	NTV-3
50 mm	NTS-3
60 mm	NTS-5
70 mm	NTS-7
80 mm	NTS-9

HEY

DISCECTOMY RETRACTOR
DISSEKTOMIESPREIZER

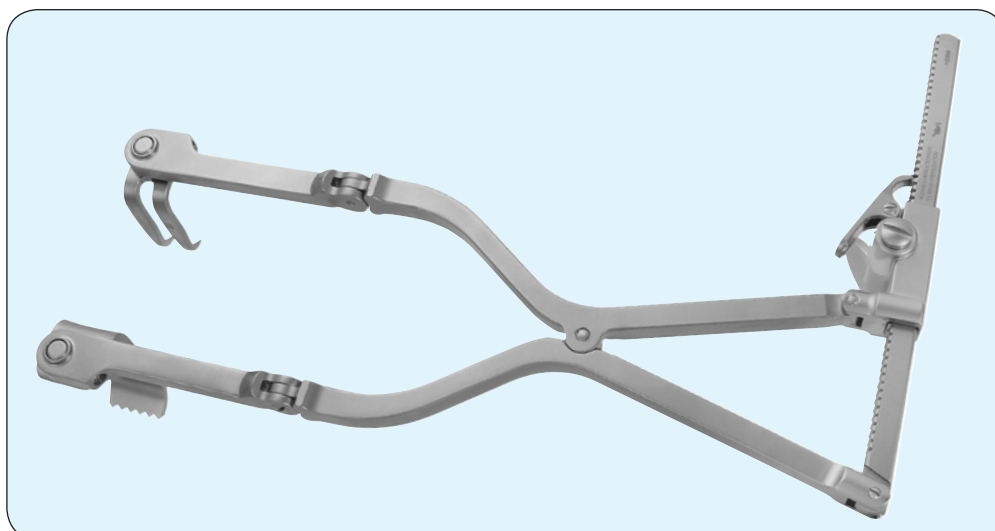


DEPTH TIEFE a	
32 mm	NFR-7
37 mm	NCL-8
53 mm	NCL-9
62 mm	NCM-1

*auxiliary tool: blade ejector NGM-6 see page 2/39
*Hilfsmittel: Blättentferner NGM-6 siehe Seite 2/39



DEPTH TIEFE a	b = 20 mm
40 mm	NEG-6
50 mm	NCL-5
60 mm	NCL-6
70 mm	NCL-7



exemplary configuration
Konfigurationsbeispiel



DEPTH TIEFE ^a	SPREADING WIDTH SPREIZWEITE	
35 mm	70 mm	NHY-5
50 mm	65 mm	NHY-9
65 mm	60 mm	NHY-0

MAYER
SPINOUS DISTRACTOR
DORNDISTRAKTOR

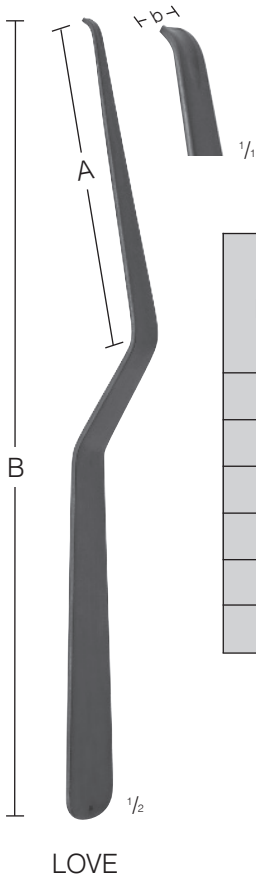


WIDTH BREITE	DEPTH /TIEFE ^a			
	65 mm	100 mm	120 mm	160 mm
3 mm	NDH-2	NDW-2	NEH-1	NEH-0
		NOW-1		
5 mm	NDH-3	NDW-3	NEH-2	NEH-4
		NOW-2	NOV-8	
7 mm	NDH-4	NDW-4	NEH-3	-
		NOW-3	NOV-9	

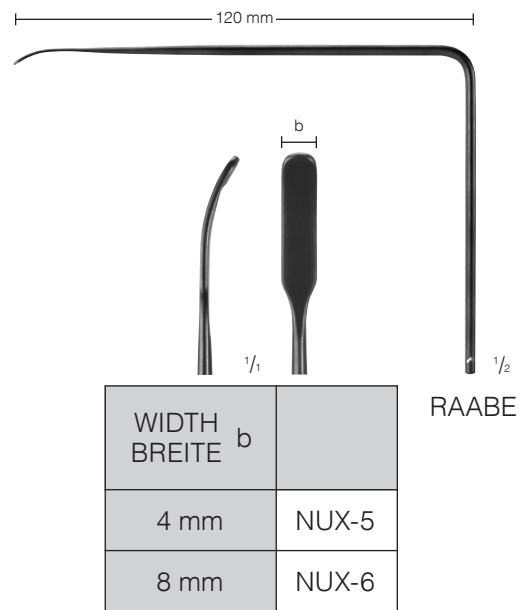
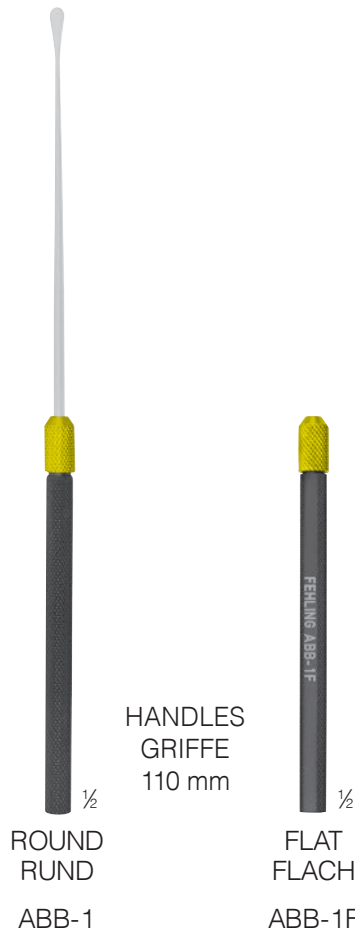
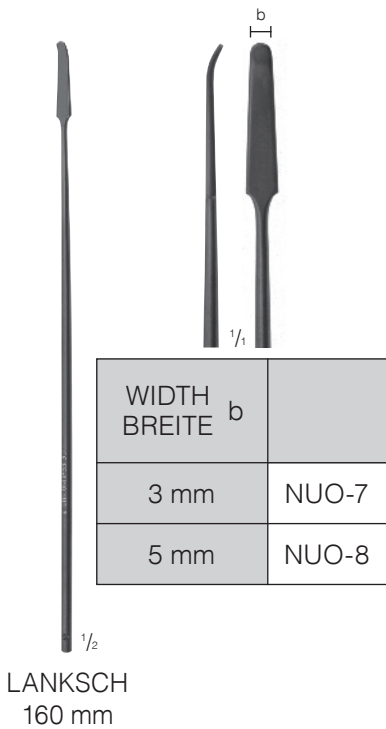
LOVE (MODIF.)
NERVE ROOT RETRACTOR
NERVWURZELHAKEN

CERAMO®

CERAMO®



WIDTH BREITE -b-	LENGTH/LÄNGE A/B	
	210 mm	160/290 mm
3 mm	NDH-1	NDI-9
5 mm	NDH-0	NDJ-0
7 mm	NDI-1	-
9 mm	NDI-2	-
11 mm	NDI-3	-
13 mm	NDI-4	-



Your Distributor
Ihr Vertriebspartner

Please note that not all products are available in every country.
Wir weisen darauf hin, dass einzelne Produkte oder Produktgruppen in manchen Ländern nicht verfügbar sein können.

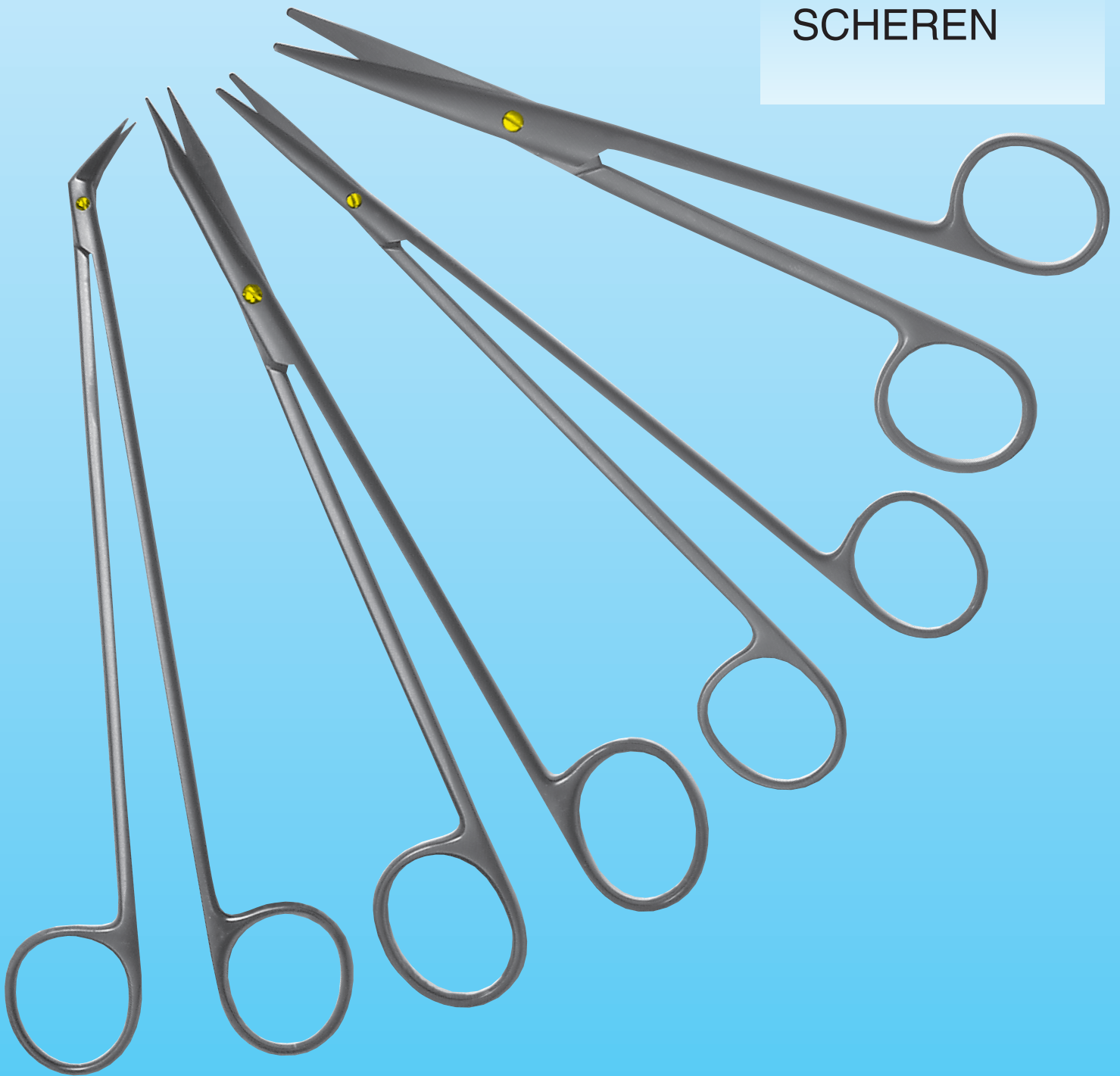
The dimensions listed in the catalog are nominal measurements. Actual values may differ slightly due to variations in production.
Bei denen im Katalog angegebenen Maßen handelt es sich um Nennmaße. Die tatsächlichen Werte können fertigungsbedingt abweichen.

FEHLING...

... THE DIFFERENCE

3

SCISSORS
SCHEREN



FEHLING
INSTRUMENTS

Hanauer Landstr. 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49(0)6188-9574.40



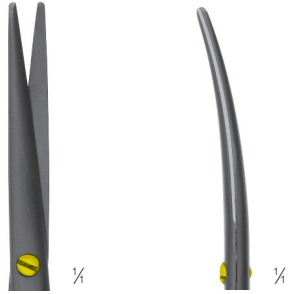
+49(0)6188-9574.45



info@fehling-instruments.de



1/2



LENGTH LÄNGE	CURVED GEBOGEN	
	CERAMO TC	TC
180 mm	BOB-0	BBJ-8

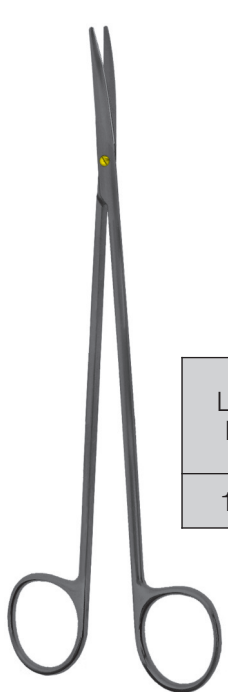
TOENNIS - ADSON



1/2



CERAMO®
TC TOENNIS
STRONG PATTERN
STARKES MODELL
180 mm
BRM-5



1/2



LENGTH LÄNGE	CURVED GEBOGEN		STRAIGHT GERADE
	CERAMO TC	TC	CERAMO TC
180 mm	BOB-1	BBJ-0	BOB-2

TOENNIS



1/2



CERAMO®
DELICATE, S-SHAPE HANDLE
FEIN, S-FORM GRIFF
180 mm
BOB-1B



MAYO



LENGTH LÄNGE	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO TC	TC	CERAMO TC	TC
145 mm	BOA-1	BBC-2	BOA-2	BBB-8
170 mm	BOA-3	BBC-3	BOA-4	BBB-9
230 mm	BOA-5	BBC-4	BOA-6	BBC-1



MAYO-STILLE



LENGTH LÄNGE	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO TC	TC	CERAMO TC	TC
145 mm	BOB-7	BBC-8	BOB-8	BBC-6
170 mm	BOA-7	BBC-9	BOA-8	BBC-7



METZENBAUM STANDARD



LENGTH LÄNGE	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO TC	TC	CERAMO TC	TC
145 mm	BOE-1	BBD-3	BOF-1	BBD-2
180 mm	BOE-2	BBD-6	BOF-2	BBD-4
200 mm	BOE-3	BBD-7	BOF-3	BCH-6
230 mm	BOE-4	BBD-8	BOF-4	BCH-7
260 mm	BOE-5	BBD-9	-	-
280 mm	BOE-6	BBE-1	BOF-9	-
300 mm	BOE-7	BBE-2	-	-

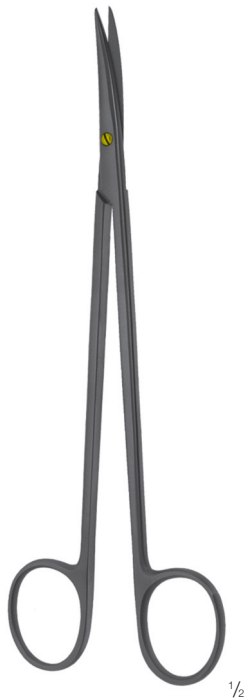


METZENBAUM FINO



LENGTH LÄNGE	BLUNT STUMPF			
	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO TC	TC	CERAMO TC	TC
145 mm	BOC-1	BBE-5	BOD-1	BBE-4
180 mm	BOC-2	BBF-2	BOD-2	BBE-8
200 mm	BOC-3	BBF-3	BOD-3	BBE-9
230 mm	BOC-4	BBF-4	BOD-4	BBF-1
260 mm	BOC-5	BBF-5	-	-
280 mm	BOC-6	BBF-6	-	-

 also available with serrated blades
auch mit Wellenschliff erhältlich



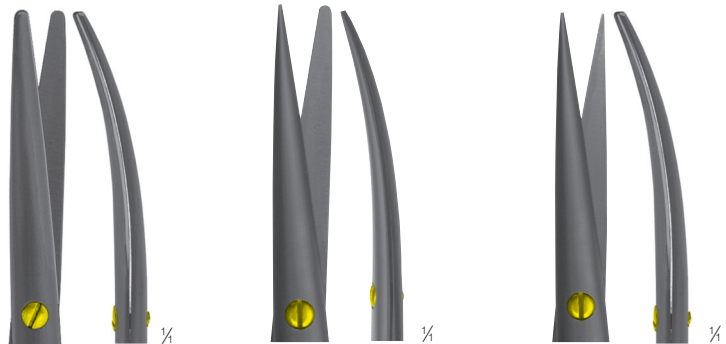
METZENBAUM FINO



LENGTH LÄNGE	POINTED SPITZ			
	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO TC	TC	CERAMO TC	TC
145 mm	BOO-0	BBE-7	BOF-0	BBE-6
180 mm	BOO-1	BBG-3	BOO-4	BBF-9
200 mm	BOO-2	BBG-4	BOO-5	BBG-1
230 mm	BOO-3	BBG-5	BOO-6	BBG-2



METZENBAUM FINO
S-SHAPE HANDLE
S-FORM GRIFF



LENGTH LÄNGE	BLUNT / BLUNT STUMPF / STUMPF		POINTED / BLUNT SPITZ / STUMPF		POINTED / POINTED SPITZ / SPITZ	
	CERAMO TC	TC	CERAMO TC	TC	CERAMO TC	TC
145 mm	BOD-5	–	BOF-5	BCS-1	BOO-7	–
180 mm	BOD-6	BBH-1	BOF-6	–	BOO-8	BBG-8
200 mm	BOD-7	BBH-2	BOF-7	–	BOO-9	BBG-9
230 mm	BOD-8	BBH-3	BOF-8	–	–	–



LEXER FINO



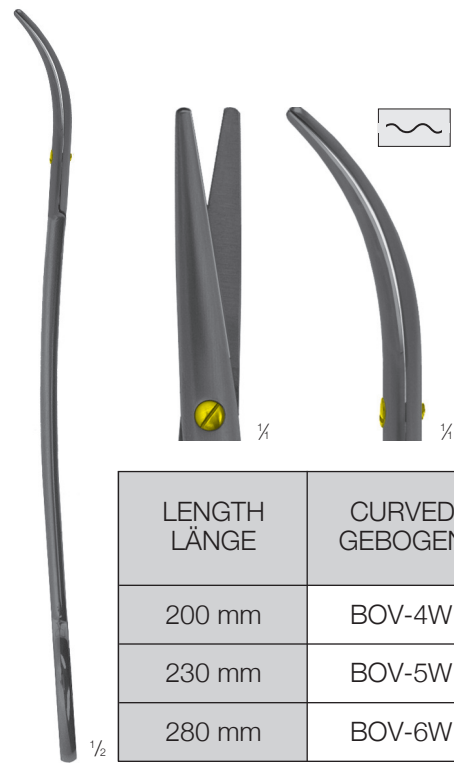
LENGTH LÄNGE	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO TC	TC	CERAMO TC	TC
160 mm	BOB-3	BBB-5	BOB-5	BBB-3
210 mm	BOB-4	BBB-6	BOB-6	BBB-4



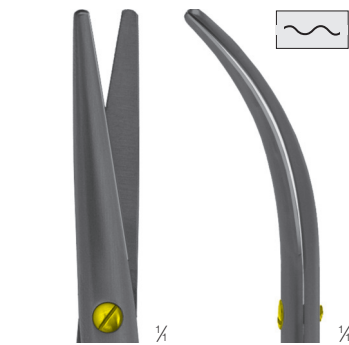
CERAMO®
THOREK



LENGTH LÄNGE	CURVED GEBOGEN
200 mm	BOV-1W
230 mm	BOV-2W
280 mm	BOV-3W



CERAMO®
THOREK
S-SHAPE HANDLE
S-FORM GRIFF



LENGTH LÄNGE	CURVED GEBOGEN
200 mm	BOV-4W
230 mm	BOV-5W
280 mm	BOV-6W

 also available with serrated blades
auch mit Wellenschliff erhältlich



DELICATE, BLUNT
FEIN, STUMPF



LENGTH LÄNGE	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO TC	TC	CERAMO TC	TC
115 mm	BON-1	BBH-7	BON-2	BBH-6



DELICATE, POINTED
FEIN, SPITZ



LENGTH LÄNGE	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO TC	TC	CERAMO TC	TC
115 mm	BON-3	BBA-9	BON-4	BBA-8
145 mm	BON-5	-	BON-6	-
160 mm	BON-7	-	BON-8	-
180 mm	BOT-5	-	BOT-6	-



RAGNELL

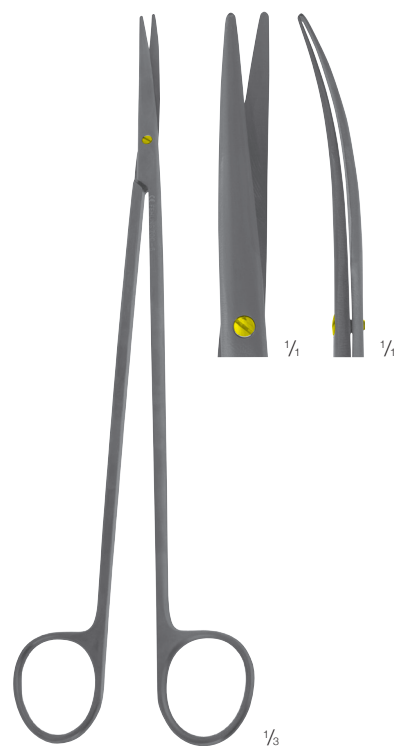
LENGTH LÄNGE	CURVED GEBOGEN	
	CERAMO TC	TC
125 mm	BOT-3	BCS-2
150 mm	BOT-4	-
160 mm	BOZ-7	-



1/4



1/4



CERAMO®
TC METZENBAUM
SUPERFINO
280 mm
ZOC-6

1/4

1/4



CERAMO®
TC STEVENS

LENGTH LÄNGE	CURVED GEBOGEN	STRAIGHT GERADE
	110 mm	BOS-5
125 mm	BOS-7	BOS-8
150 mm	BOT-1	BOT-8



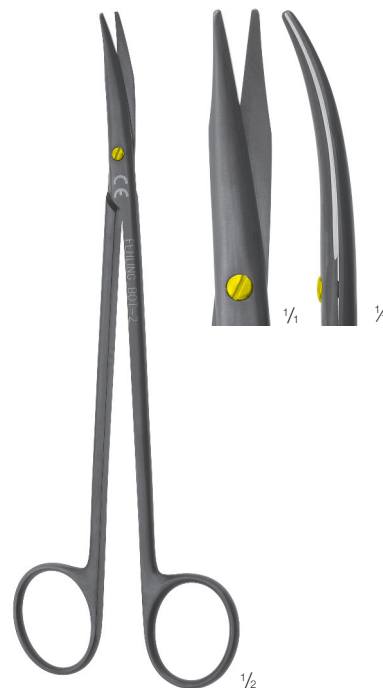
1/4



1/4



1/4



CERAMO®
TC REYNOLDS
175 mm
BOT-2

1/4

1/4



DELICATE
FEIN
115 mm

CERAMO TC	TC
BOT-7	BCY-3



UNIVERSAL
120 mm

CERAMO TC	TC
BOS-1	BBK-2



CERAMO®
TC GOLDMANN-FOX



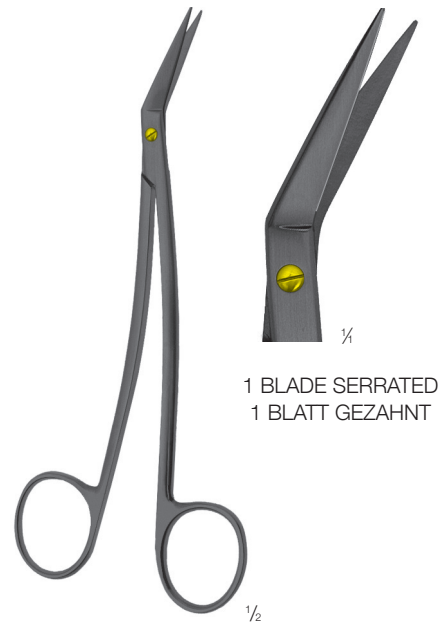
LENGTH LÄNGE	1 BLADE SERRATED 1 BLATT GEZAHNT		NON-SERRATED UNGEZAHNT	
	CURVED GEBOGEN	STRAIGHT GERADE	CURVED GEBOGEN	STRAIGHT GERADE
130 mm	BOY-3	BOY-2	BOY-5	BOY-4

CERAMO®



1 BLADE SERRATED
1 BLATT GEZAHNT

TC LOCKLIN
160 mm
BOV-7



1 BLADE SERRATED
1 BLATT GEZAHNT

TC LOCKLIN S
160 mm
BOV-8



1 BLADE SERRATED
1 BLATT GEZAHNT

TC DEAN
170 mm
BOV-9



INTIMA
170 mm
BOR-6



POTTS



LENGTH LÄNGE	CERAMO TC	TC
190 mm	BOP-1	BCL-7
230 mm	BOP-4	-
190 mm	BOP-2	BCJ-5
230 mm	BOP-5	-
185 mm	BOP-3	BCJ-6
225 mm	BOP-6	BCJ-7



DE BAKEY




LENGTH LÄNGE	CERAMO TC	TC
190 mm	BOM-4	BAZ-8
230 mm	BOM-7	BAZ-9
190 mm	BOM-5	BBA-1
230 mm	BOM-8	BBA-2
185 mm	BOM-6	BBA-3
225 mm	BOM-9	BBA-4

CERAMO®



TC HYPERION

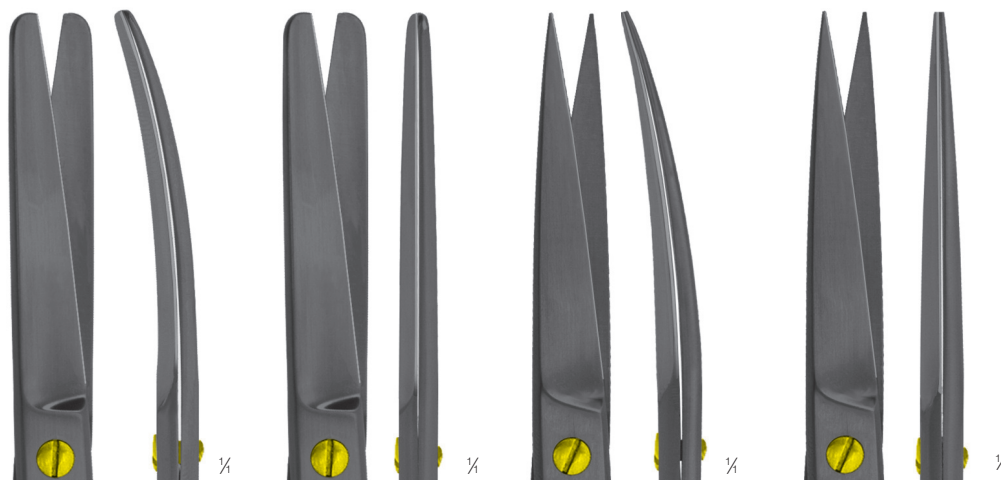
	LENGTH LÄNGE	BLADE LENGTH BLATTLÄNGE	
		 10 mm	 14 mm
 25°	180 mm	BOP-7	BOR-1
 45°	180 mm	BOR-7	BOR-2
 60°	175 mm	BOP-8	BOR-3
 90°	170 mm	BOR-8	BOR-4
 125°	170 mm	BOP-9	BOR-5



STANDARD



LENGTH LÄNGE	POINTED / BLUNT SPITZ / STUMPF			
	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO	UNCOATED	CERAMO	UNCOATED
105 mm	BOI-1	-	BOJ-1	BAD-7
115 mm	BOI-2	BAG-2	BOJ-2	BAD-8
145 mm	BOI-3	BAG-4	BOJ-3	BAE-1
165 mm	BOI-4	BAG-6	BOJ-4	BAE-3
185 mm	BOI-5	BAG-7	BOJ-5	BAE-4
205 mm	BOI-6	-	BOJ-6	BAE-5



LENGTH LÄNGE	BLUNT /BLUNT STUMPF / STUMPF				POINTED / POINTED SPITZ / SPITZ			
	CURVED GEBOGEN		STRAIGHT GERADE		CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO	UNCOATED	CERAMO	UNCOATED	CERAMO	UNCOATED	CERAMO	UNCOATED
105 mm	-	-	-	BAC-8	-	-	-	BAE-6
115 mm	BOK-1	BAF-3	BOK-4	BAC-9	-	BAG-8	-	BAE-7
145 mm	BOK-2	BAF-5	BOK-5	BAD-2	BOI-7	BAH-1	BOJ-7	BAE-9
165 mm	BOK-3	BAF-7	BOK-6	BAD-4	BOI-8	BAH-3	BOJ-8	BAF-2
185 mm	-	BAF-9	-	BAD-5	-	-	-	-
205 mm	-	BAG-1	-	BAD-6	-	-	-	-



DOYEN



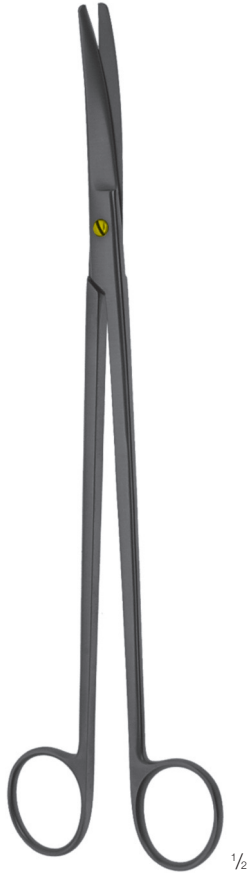
LENGTH LÄNGE	CURVED GEBOGEN		STRAIGHT GERADE	
	CERAMO	UNCOATED	CERAMO	UNCOATED
180 mm	BOL-1	BAJ-7	BOL-2	BAJ-5



TC SIMS



LENGTH LÄNGE	CURVED GEBOGEN	
	CERAMO	UNCOATED
200 mm	BOL-4	BBJ-6
230 mm	BOL-5	BBJ-7



WERTHEIM



LENGTH LÄNGE	CURVED GEBOGEN	
	CERAMO TC	TC
230 mm	BOL-6	BCG-8



LIGATUR



LENGTH LÄNGE	CURVED GEBOGEN	
	CERAMO TC	TC
145 mm	BOZ-1	-
180 mm	BOZ-2	BCN-8

1 BLADE SERRATED
1 BLATT GEZAHNT



CERAMO®
PARAMETRIUM



LENGTH LÄNGE	CURVED GEBOGEN
215 mm	BOW-9
255 mm	BOW-7
295 mm	BOW-8
360 mm	BOX-0



BANDAGE SCISSORS
VERBANDSCHEREN

LENGTH LÄNGE	LISTER		TC LISTER	
	CERAMO	UNCOATED	CERAMO	UNCOATED
140 mm	BOL-7	KBR-9	BOS-2	-
180 mm	BOL-8	KBS-2	BOS-3	KBT-1
200 mm	BOL-3	KBS-3	BOS-4	-

FEHLING...

... THE DIFFERENCE

4

FORCEPS,
CLAMPS AND CLIPS

PINZETTEN,
KLEMMEN UND CLIPS



FEHLING
INSTRUMENTS

Hanauer Landstr. 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49(0) 61 88 - 9574.40



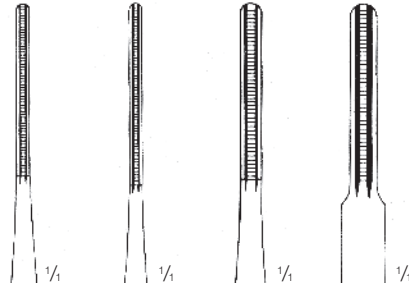
+49(0) 61 88 - 9574.45



info@fehling-instruments.de



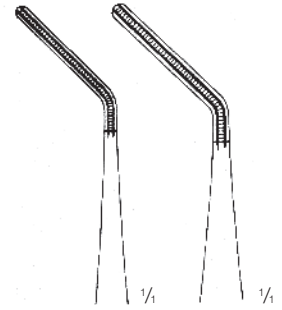
DE BAKEY



	1,5 mm	2,0 mm	2,8 mm	3,5 mm
150 mm	MBL-2	MBL-5	MBK-2	MBM-4
195 mm	MBL-3	MBL-6	MBK-3	MBM-5
240 mm	MBL-4	MBL-7	MBK-4	MBM-6
300 mm	-	-	MBL-8	MBM-7



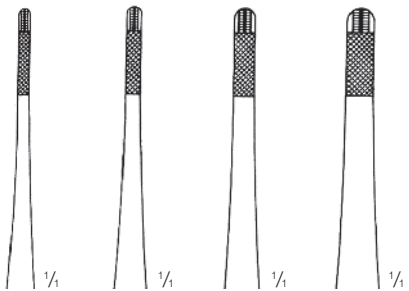
DE BAKEY



	2,0 mm	2,7 mm
150 mm	MBL-9	-
195 mm	MBM-1	-
240 mm	MBM-2	-
300 mm	-	MBM-3



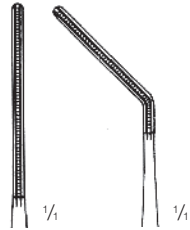
TC DE BAKEY



	1,5 mm	2,0 mm	2,7 mm	3,5 mm
150 mm	MEJ-2	MEJ-4	MEJ-7	-
195 mm	MDZ-1	MEJ-5	MEJ-8	MEK-1
240 mm	MEJ-3	MEJ-6	MEJ-9	MEK-2



1/2

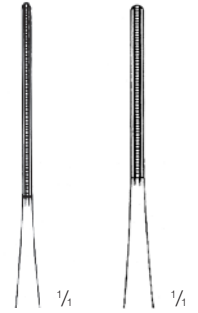


	1,5 mm	1,5 mm
150 mm	MBK-7	-
195 mm	MBK-8	MBL-1
240 mm	MBK-9	-

DE BAKEY
DIETRICH



1/2

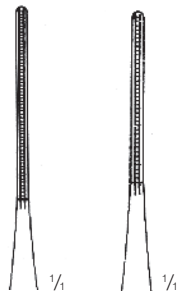


	1,0 mm	1,5 mm
150 mm	-	CDN-6
195 mm	CDK-7	-
240 mm	CDN-7	-

DE BAKEY
ULTRA LIGHT



1/2

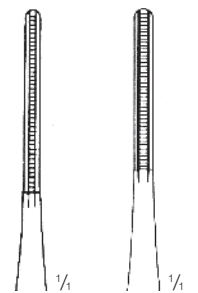


	1,5 mm	1,8 mm
150 mm	MBP-1	MED-3
195 mm	MBP-2	MED-4
240 mm	MBP-3	MED-5

DIETRICH
TITANIUM / TITAN



1/2



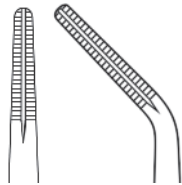
	2,0 mm	2,8 mm
150 mm	MFG-8	MBP-4
195 mm	MFG-9	MBP-5
240 mm	MFH-1	MBP-6

DIETRICH
TITANIUM / TITAN



1/2

HEART VALVE FORCEPS
HERZKLAPPENPINZETTE

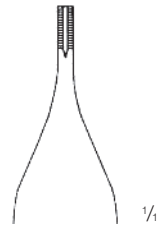


	2,5 mm	3,0 mm
200 mm	CDP-5	-
230 mm	CDP-2	CDP-7
250 mm	CDP-3	-



1/2

ADSON-BRAUN
120 mm



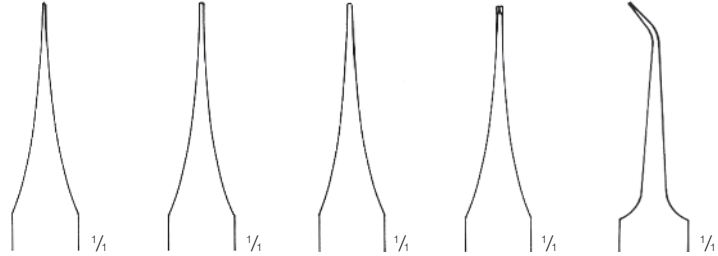
1/4

CERAMO®	COX-0
UNCOATED UNBESCHICHTET	CAK-9

JEWELLER FORCEPS
UHRMACHERPINZETTEN



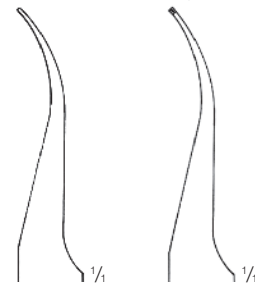
1/4
110 mm



	0,1 mm	0,2 mm	0,4 mm	1x2 TEETH/ZÄHNE	0,25 mm
CERAMO®	-	COW-7	COW-8	-	-
UNCOATED UNBESCHICHTET	CAY-7	CAY-8	CAY-9	CAZ-2	CAZ-1



1/4
115 mm



	0,2 mm	1x2 TEETH/ZÄHNE
CERAMO®	CRB-1	-
UNCOATED UNBESCHICHTET	CAY-6	CAZ-4



GERALD

CERAMO®	TCM 1,0 mm
150 mm	COK-0
180 mm	COK-1
210 mm	COK-2
230 mm	COK-3

UNCOATED UNBESCHICHTET	1,0 mm
180 mm	CAE-8
210 mm	CAF-0
230 mm	CAE-9



CUSHING
175 mm

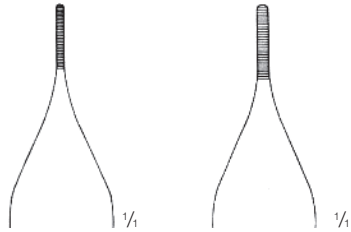
TCM
1,5 mm
CERAMO®
COW-1

1,5 mm
UNCOATED
UNBESCHICHTET
CBP-9



1/2

ADSON



1/4

1/4

	MICRO / MIKRO 0,8 mm		1,2 mm	
	120 mm	150 mm	120 mm	150 mm
CERAMO®	COZ-9	COW-6	COZ-7	COZ-8
UNCOATED UNBESCHICHTET	CAA-5	CAA-6	CAA-2	CAA-3



1/2

TC ADSON



1/4

	1,4 mm
120 mm	CAZ-6
150 mm	CAZ-7



1/2

SEMKEN



1/4

1/4

	120 mm	150 mm
CERAMO®	COP-5	COP-6
UNCOATED UNBESCHICHTET	CAG-8	CAG-9



1/2

TC POTTS-SMITH

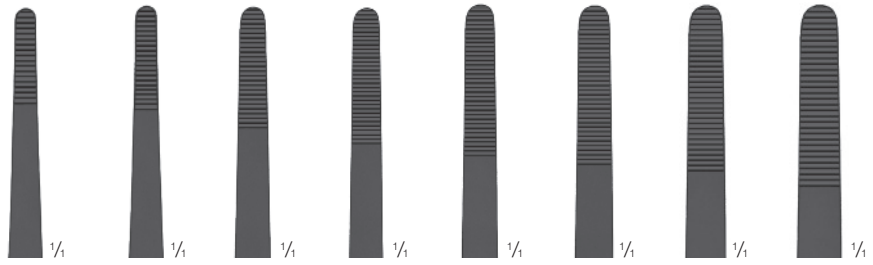


145 mm	CBA-7
180 mm	CBA-8
200 mm	CBA-9
230 mm	CBB-1
250 mm	CBB-2



1/2

STANDARD

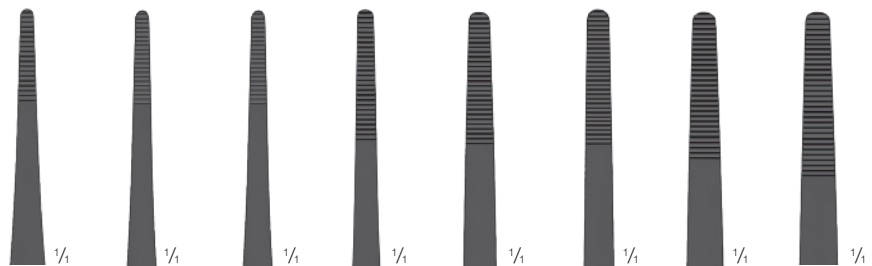


	115 mm	130 mm	145 mm	160 mm	180 mm	200 mm	250 mm	300 mm
CERAMO®	COR-1	COR-2	COR-3	COR-4	COR-5	COR-6	COR-7	COR-8
UNCOATED UNBESCHICHTET	CAA-9	CAB-1	CAB-2	CAB-3	CAB-4	CAB-5	CAB-6	CAB-7



1/2

DELICATE
SCHLANK

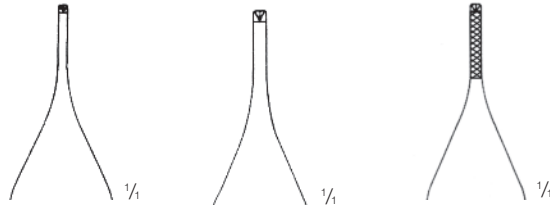


	115 mm	130 mm	145 mm	160 mm	180 mm	200 mm	250 mm	300 mm
CERAMO®	COZ-O	COZ-1	COR-9	COZ-2	COZ-3	COZ-4	COZ-5	COZ-6
UNCOATED UNBESCHICHTET	CAC-3	CAC-4	CAC-5	CAC-6	CAC-7	CAC-8	CAC-9	CAD-1



1/2

ADSON

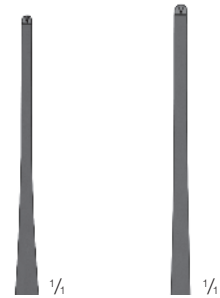


	1x2 TEETH / ZÄHNE					
	MICRO / MIKRO 0,8 mm		1,2 mm		TC 1,8 mm	
	120 mm	150 mm	120 mm	150 mm	120 mm	150 mm
CERAMO®	COW-4	COW-5	COW-3	COW-9	-	-
UNCOATED UNBESCHICHTET	CAL-1	CAL-2	CAK-7	CAK-8	CAZ-8	CAZ-9



1/2

SEMKEN



	1x2 TEETH / ZÄHNE	
	125 mm	150 mm
CERAMO®	COP-8	COP-7
UNCOATED UNBESCHICHTET	CAU-9	CAV-1



1/2

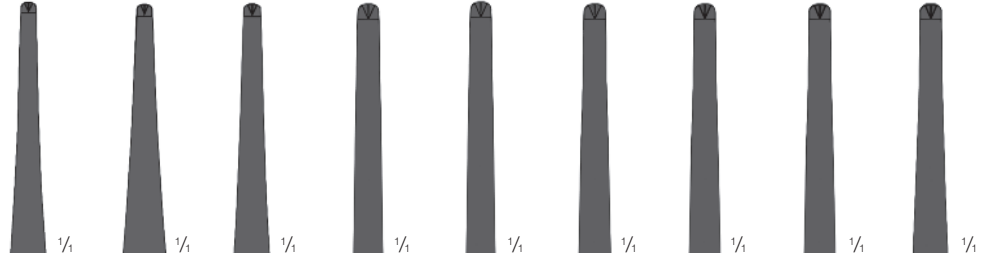
RUSSIAN PATTERN
RUSSISCHES MODELL

	150 mm	200 mm	250 mm
CERAMO®	COW-2	-	-
UNCOATED UNBESCHICHTET	CAU-3	CAU-4	CAU-5

1x2 TEETH / ZÄHNE



1/2



	105 mm	115 mm	130 mm	145 mm	160 mm	180 mm	200 mm	250 mm	300 mm
CERAMO®	CZD-1	CZD-2	CZD-3	CZD-4	CZD-5	CZB-1	CZD-7	CZD-8	CZD-9
UNCOATED UNBESCHICHTET	CAL-5	CAL-6	CAL-7	CAL-8	CAL-9	CAM-1	CAM-2	CAM-4	CAM-5

STANDARD

1x2 TEETH / ZÄHNE



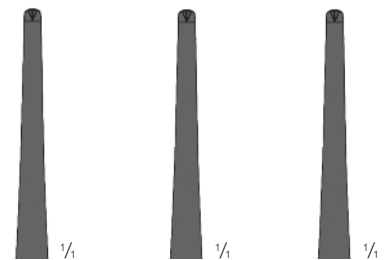
1,2 mm

1/2



1/2

MEDIUM



	145 mm	160 mm	250 mm
CERAMO®	CZB-8	CZB-9	COP-9
UNCOATED UNBESCHICHTET	CAP-9	CAR-1	CAP-8

1x2 TEETH / ZÄHNE

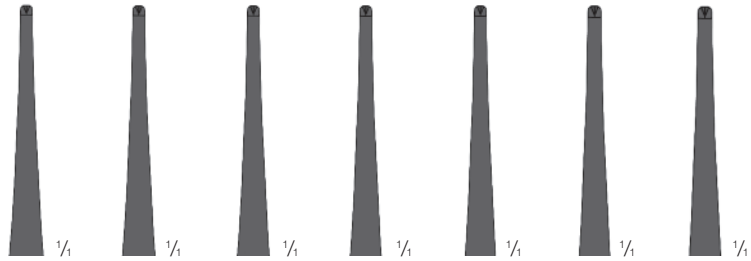
	150 mm	180 mm	210 mm	230 mm
CERAMO®	COI-1	COI-2	COI-3	COI-4
UNCOATED UNBESCHICHTET	-	CAS-8	CAS-9	CAT-1

GERALD



DELICATE
SCHLANK

1x2 TEETH / ZÄHNE



	115 mm	130 mm	145 mm	160 mm	180 mm	200 mm	250 mm
CERAMO®	CZB-4	CZB-5	CZB-3	CZB-6	CZB-7	-	-
UNCOATED UNBESCHICHTET	CAN-9	CAP-1	CAP-2	CAP-3	CAP-4	CAP-5	CAP-7



200 mm

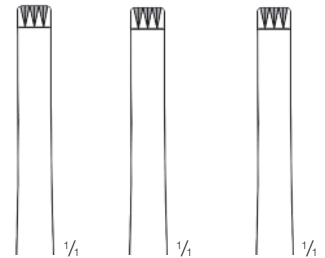
2x3 TEETH / ZÄHNE



CERAMO®	CZB-2
UNCOATED UNBESCHICHTET	CAN-2



3x4 TEETH / ZÄHNE




145 mm	160 mm	300 mm
CAN-5	CAN-6	CAN-7

CLIP APPLYING FORCEPS
CLIPANLEGEZANGEN



CERAMO®

FOR / FÜR YASARGIL
+ SUGITA CLIPS


		CLIP ROTATABLE / DREHBAR	
			
TOTAL LENGTH GESAMTLÄNGE		230 mm	270 mm
LENGTH a LÄNGE a		80 mm	120 mm
CLIP SIZE CLIP GRÖßE	MINI	TOQ-9	TOQ-7
	STANDARD	TOQ-8	TOQ-6

SHAFT ROTATABLE
SCHAFT DREHBAR



MEMORY

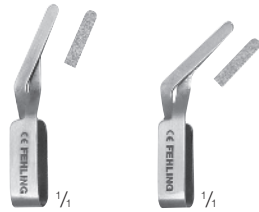
FOR / FÜR YASARGIL + SUGITA CLIPS

		CLIP FIXED / STARR			CLIP ROTATABLE / DREHBAR		
							
LENGTH a LÄNGE a		70 mm	90 mm	110 mm	70 mm	90 mm	110 mm
CLIP SIZE CLIP GRÖßE	MINI	NIB-1	NIB-2	NIB-3	NIB-7	NIB-8	NIB-9
	STANDARD	NIC-0	NIC-1	NIB-0	NIB-4	NIB-5	NIB-6

The shafts of MEMORY clip applying forceps are constructed of shape-memory metal. They are malleable in normal O.R. temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperatures, such as those found in the autoclave, the instruments regain their initial shape.

MEMORY Clipanlegezangen haben einen Schaft aus Formgedächtnismetall. Sie sind bei normaler OP-Temperatur biegsam. Sie können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.

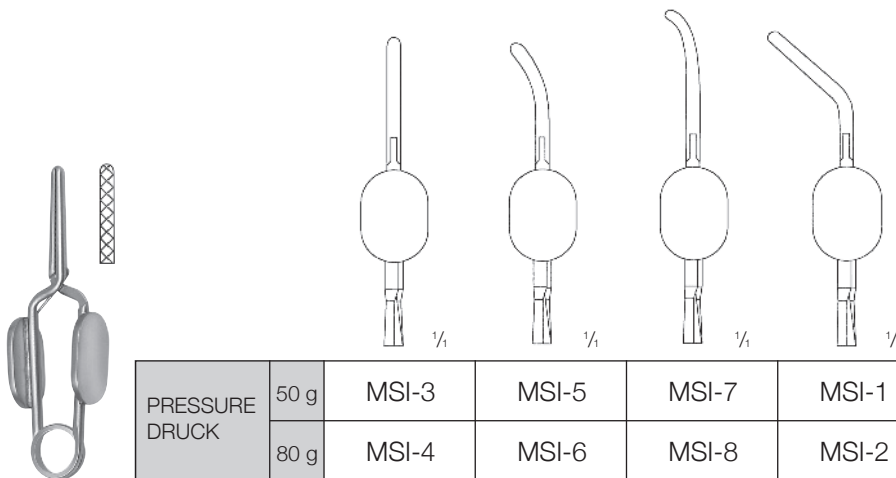
TCM SCHWARTZ



PRESSURE DRUCK	25°	45°
ca. 5,0 N	MIC-6	MIC-7
ca. 7,8 N	MIC-4	MIC-5



SCHWARTZ
CLIP APPLYING FORCEPS
CLIPANLEGEZANGE
190 mm
MBC-9



PRESSURE DRUCK	50 g	MSI-3	MSI-5	MSI-7	MSI-1
	80 g	MSI-4	MSI-6	MSI-8	MSI-2

MUELLER
NON-TRAUMATIC
ATRAUMATISCH



CLIP APPLYING FORCEPS
CLIPANLEGEZANGE

140 mm	DBA-3
180 mm	DBA-4
220 mm	DBA-5

TITANIUM



V (Vena) = low pressure
V (Vena) = schwacher Druck
1 N ± 10%



A (Arteria) = high pressure
A (Arteria) = starker Druck
2 N ± 20%

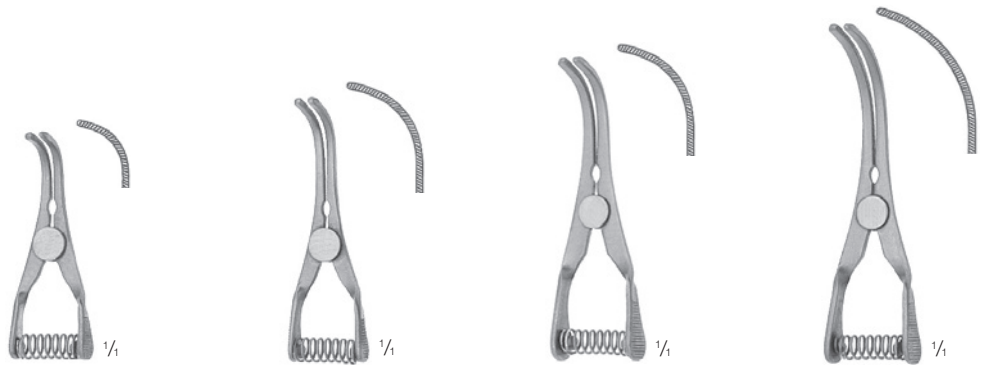


IDENTIFICATION KENNZEICHNUNG	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA
ITEM. - NO. ART. - NR.	MMA-1	MKS-9	MMF-7	MML-6	MKT-1	MKE-5	MML-8	MML-7
TOTAL LENGTH GESAMTLÄNGE	30 mm		35 mm		40 mm		50 mm	
LENGTH OF JAW MAULLÄNGE	9 mm		13 mm		14 mm		23 mm	
WEIGHT GEWICHT	1 gr.		1 gr.		1 gr.		1,5 gr.	

TITANIUM



IDENTIFICATION KENNZEICHNUNG	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA
ITEM. - NO. ART. - NR.	MMF-8	MMA-9	MMA-8	MMB-1	MML-9	MMB-2	MMF-3	MMB-3
TOTAL LENGTH GESAMTLÄNGE	30 mm		35 mm		40 mm		48 mm	
LENGTH OF JAW MAULLÄNGE	9 mm		13 mm		14 mm		22 mm	
WEIGHT GEWICHT	1 gr.		1 gr.		1 gr.		1,5 gr.	



IDENTIFICATION KENNZEICHNUNG	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA	V = VENA	A = ARTERIA
ITEM. - NO. ART. - NR.	MMM-2	MMM-1	MMF-4	MMF-5	MMM-4	MMM-3	MMA-2	MKT-2
TOTAL LENGTH GESAMTLÄNGE	30 mm		35 mm		40 mm		45 mm	
LENGTH OF JAW MAULLÄNGE	10 mm		14 mm		15 mm		21 mm	
WEIGHT GEWICHT	1 gr.		1 gr.		1 gr.		1,5 gr.	

WELDON



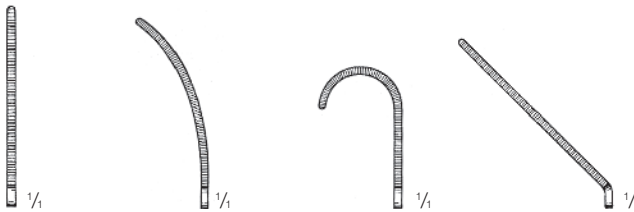
35 mm



STRAIGHT GERADE	CURVED GEBOGEN	ACUTELY CURVED STARK GEBOGEN	ANGLED GEWINKELT
MAZ-7	MAZ-9	MBA-2	MEE-9



45 mm

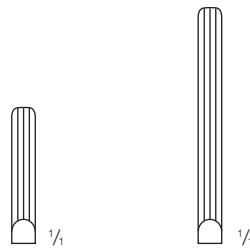


STRAIGHT GERADE	CURVED GEBOGEN	ACUTELY CURVED STARK GEBOGEN	ANGLED GEWINKELT
MAZ-8	MBA-1	MEE-8	MBA-4



APPLYING FORCEPS FOR
SPRING BULLDOG CLAMPS
ANLEGEZANGE FÜR
FEDERBULLDOGGKLEMMEN

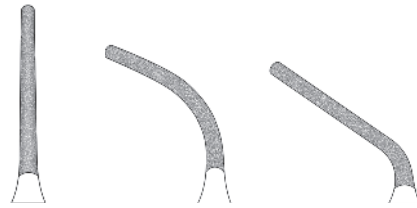
MMM-0



JAW LENGTH MAULLÄNGE	18 mm	28 mm
TOTAL LENGTH GESAMTLÄNGE	42 mm	52 mm
	MBC-0	MBA-0



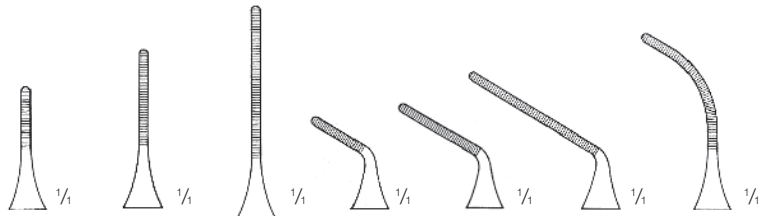
TCM IMA
55 mm



STRAIGHT GERADE	CURVED GEBOGEN	ANGLED GEWINKELT
MRK-1	MRK-2	MRK-3



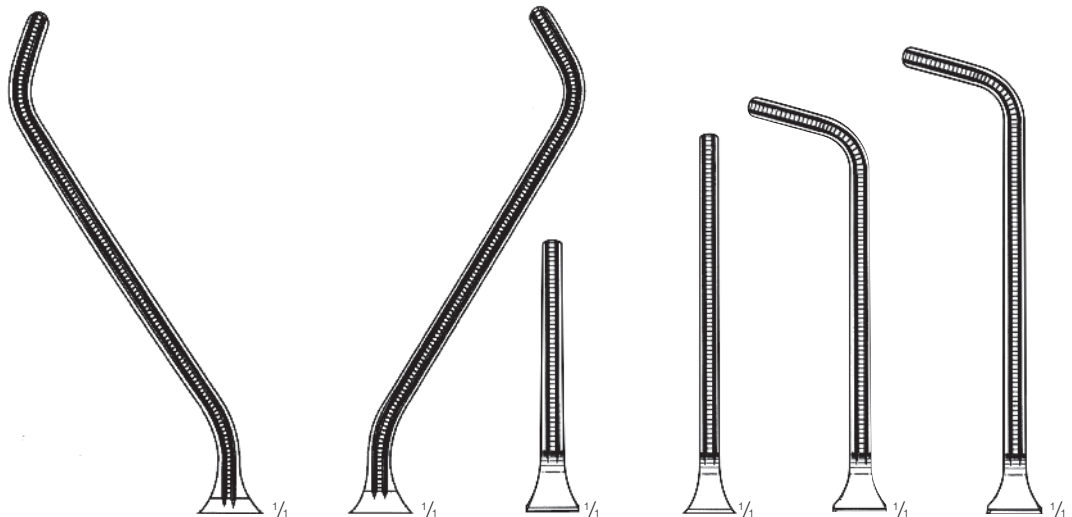
DIETHRICH
55 mm



JAW LENGTH MAULLÄNGE	8 mm	12 mm	20 mm	8 mm	12 mm	20 mm	20 mm
PRESSURE: 0,8 N DRUCK: 0,8 N	MEF-1	MEC-2	MAW-6	MAW-7	MAW-8	MAX-1	MAW-5



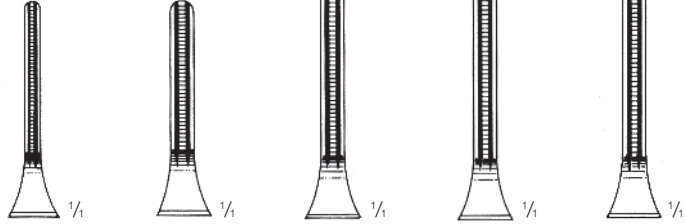
GREGORY
"SOFT" CAROTID CLAMPS
"SOFT" CAROTIS KLEMMEN



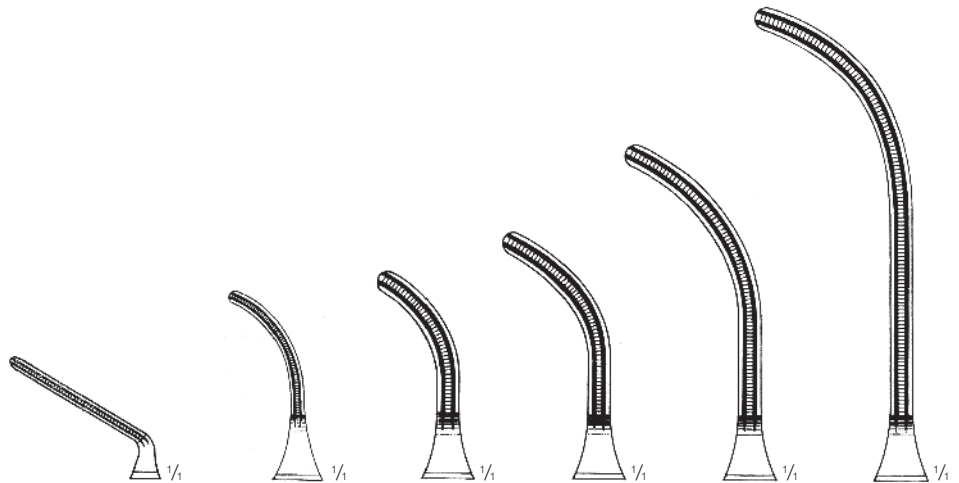
JAW LENGTH MAULLÄNGE	60 mm	60 mm	27 mm	44 mm	55 mm	60 mm
TOTAL LENGTH GESAMTLÄNGE	110 mm	110 mm	90 mm	110 mm	105 mm	110 mm
	MNI-7	MNI-6	MNJ-1	MNJ-2	MNJ-3	MNJ-4

DE BAKEY

NON-TRAUMATIC
ATRAUMATISCH

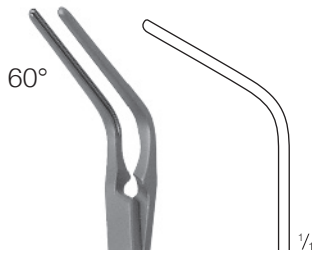


TOTAL LENGTH GESAMTLÄNGE	55 mm	75 mm	90 mm	105 mm	120 mm
PRESSURE / DRUCK: 1,8 N	MAM-5	MAM-6	MAM-7	MAM-8	MAM-9
PRESSURE / DRUCK: 2,8 N	MAO-1	-	-	-	-

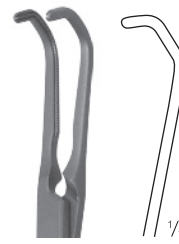


TOTAL LENGTH GESAMTLÄNGE	55 mm	55 mm	75 mm	85 mm	105 mm	120 mm
PRESSURE / DRUCK: 1,8 N	MAM-4	MAN-2	MAN-3	MAN-4	MAN-5	MAN-6
PRESSURE / DRUCK: 2,8 N	MAO-3	MAO-2	-	-	-	-

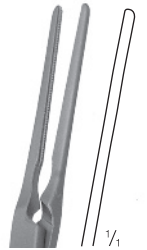
TITANIUM



MHN-1



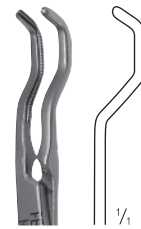
6 mm
MHN-2



MHN-9



DE BAKEY
105 mm



6 mm
MHN-3



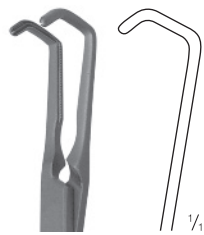
DE BAKEY
105 mm



9 mm
MHN-4



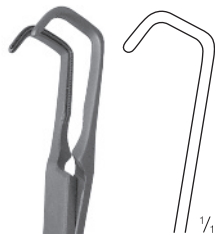
DE BAKEY
105 mm



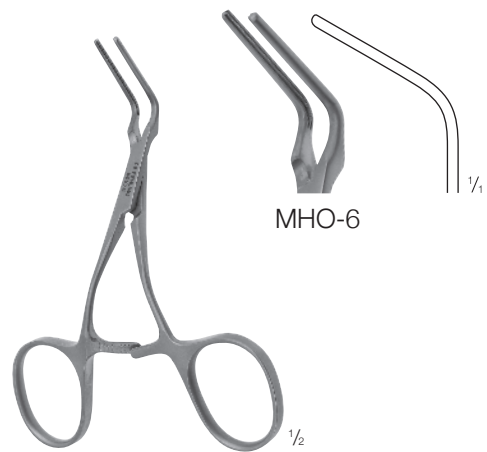
6 mm
MHO-3



SEBENING
105 mm

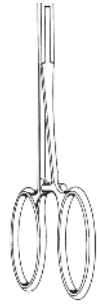


9 mm
MHO-4

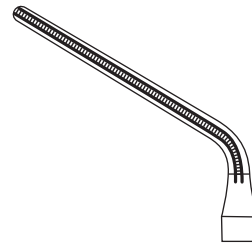


SEBENING
105 mm

MHO-6



125 mm	145 mm	165 mm
MAC-2	MAE-7	MAH-2
MER-4	MDV-9	MER-5

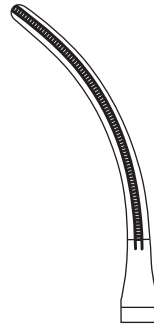


125 mm	145 mm	165 mm
MAC-4	MAE-9	MAH-4
MER-8	MDW-2	MER-9



125 mm	145 mm	165 mm
MAC-5	MAF-1	MAH-5
MES-1	MES-2	MES-3

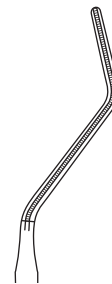
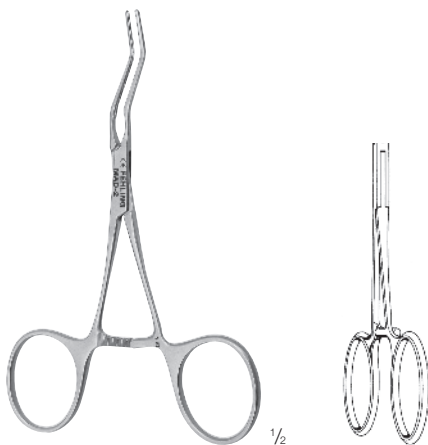
TITANIUM
TITAN



125 mm	145 mm	165 mm
MAD-1	MAF-6	MAJ-1
MET-4	MET-5	MET-6

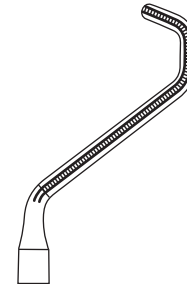


125 mm	145 mm	165 mm
MAC-9	MAF-5	MAH-9
MDT-8	MDU-2	MDU-5

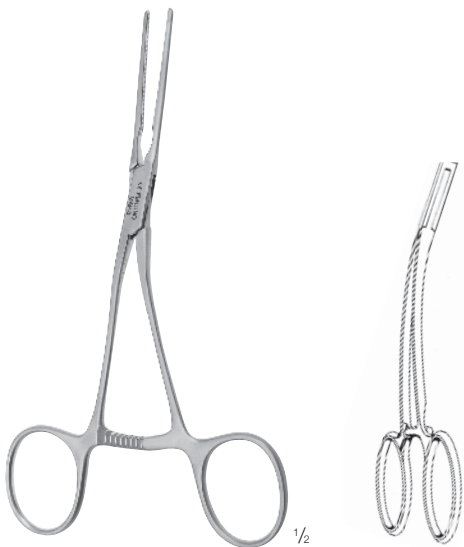


125 mm	145 mm	165 mm
MAD-2	MAF-7	MAJ-2
MET-7	MET-8	MET-9

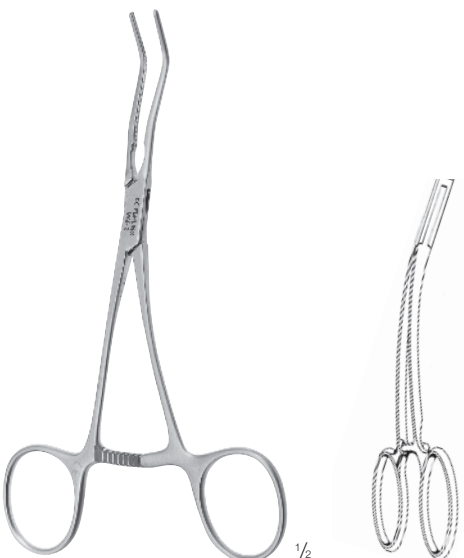
TITANIUM
TITAN



125 mm	145 mm	165 mm
MAC-8	MAF-4	MAH-8
MET-1	MET-2	MET-3

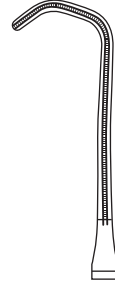
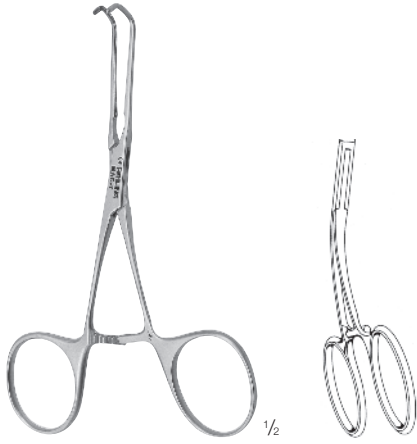


125 mm	145 mm	165 mm
MAD-3	MAF-8	MAJ-3
MEU-1	MEU-2	MEU-3

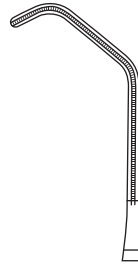


125 mm	145 mm	165 mm
MAC-6	MAF-2	MAH-6
MES-4	MES-5	MES-6

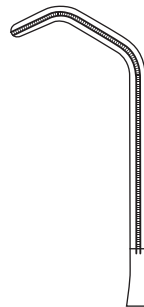
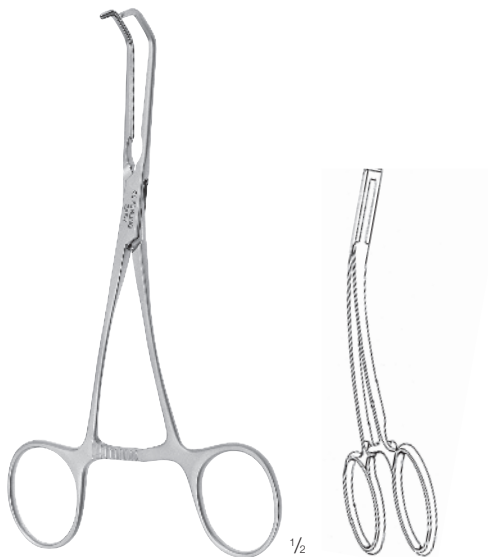
TITANIUM
TITAN



125 mm	145 mm	165 mm
MAC-7	MAF-3	MAH-7
MES-7	MES-8	MES-9



125 mm	145 mm	165 mm
MAD-9	MAG-5	MAJ-9
MEU-9	MEV-1	MEV-2



125 mm	145 mm	165 mm
ZAE-6	ZAF-7	ZAF-4

TITANIUM
TITAN



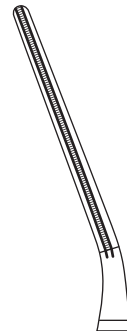
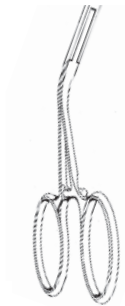
1/2



125 mm	145 mm	165 mm
MAC-3	MAE-8	MAH-3
MER-6	MDW-1	MER-7



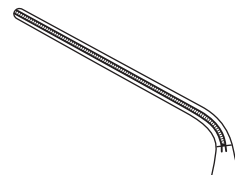
1/2



125 mm	145 mm	165 mm
MAD-4	MAF-9	MAJ-4
MEU-4	MEU-5	MFA-1

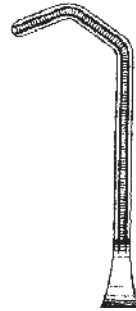


1/2



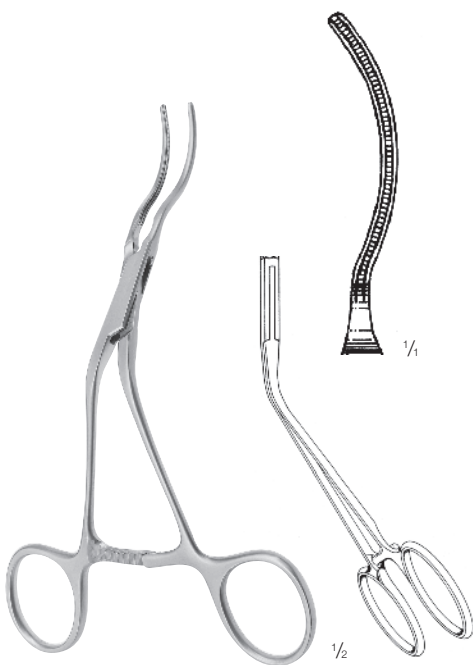
125 mm	145 mm	165 mm
MAE-3	MAG-8	MAK-3
MEV-3	MEV-4	MDW-5

TITANIUM
TITAN

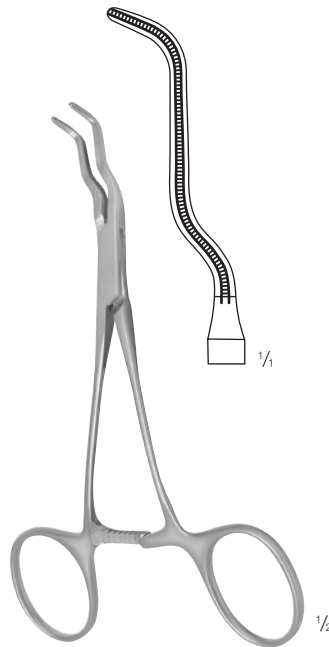


125 mm	145 mm	165 mm
MAD-6	MAG-2	MAJ-6
MEU-6	MEU-7	MEU-8

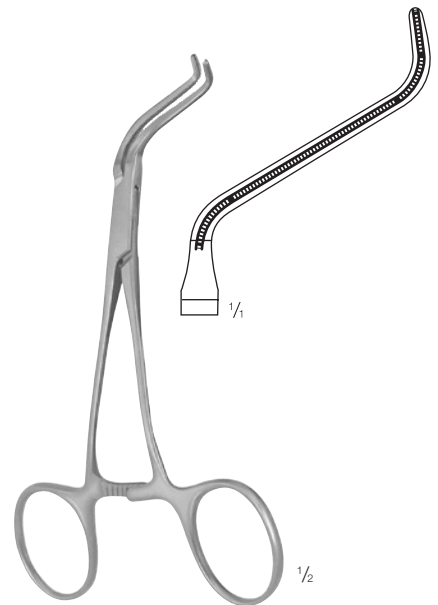
 TITANIUM
TITAN



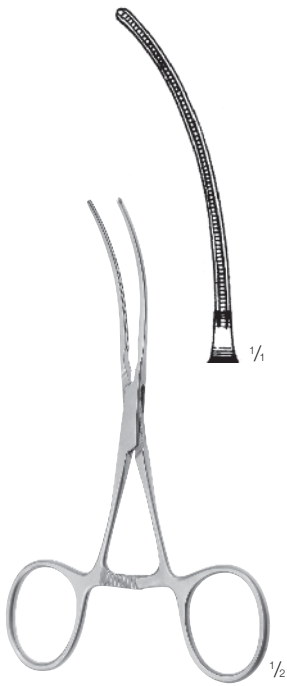
155 mm
MAH-0



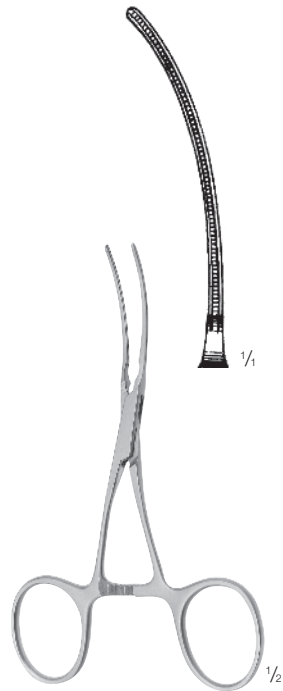
KITZMILLER
140 mm
MHD-3



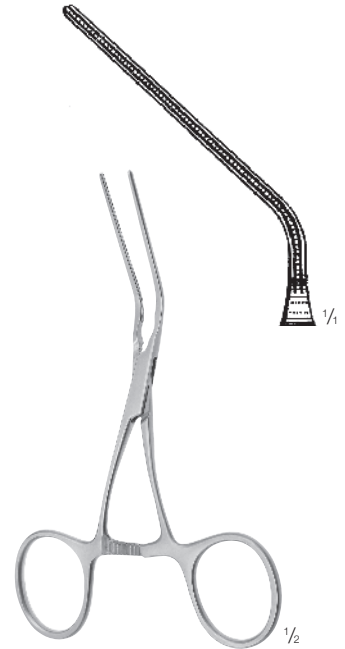
KITZMILLER
140 mm
MHD-4



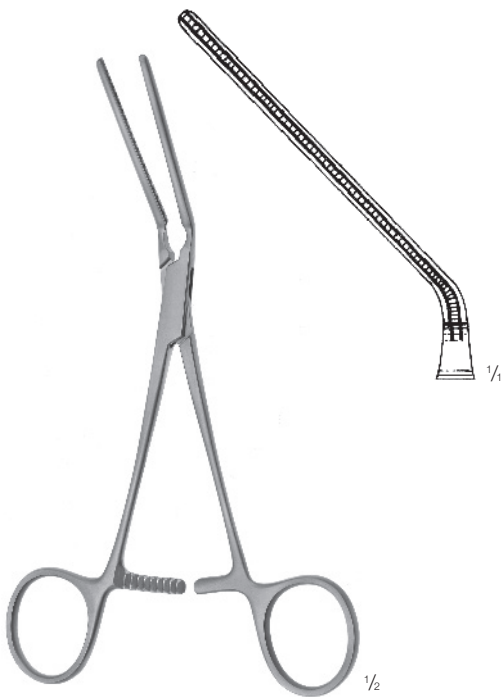
130 mm
MAE-4



130 mm
MAE-6



130 mm
MAE-5

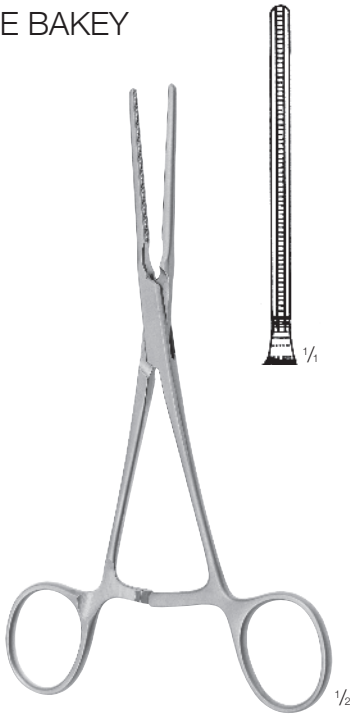


TITANIUM
175 mm
MDU-7

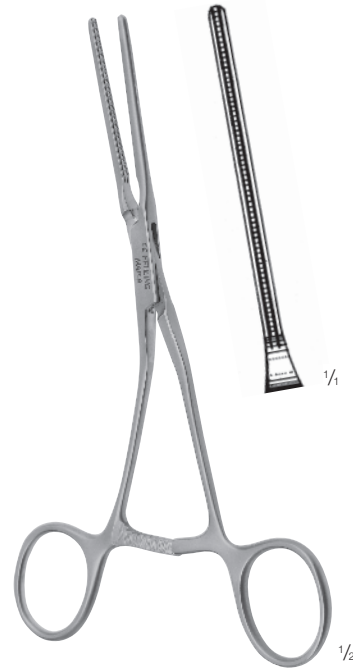


DE BAKKEY
100 mm
MED-9

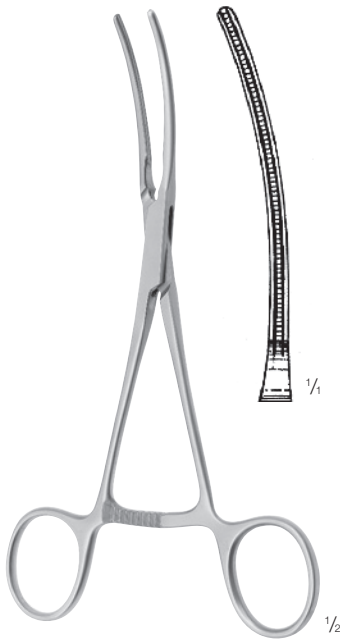
DE BAKEY



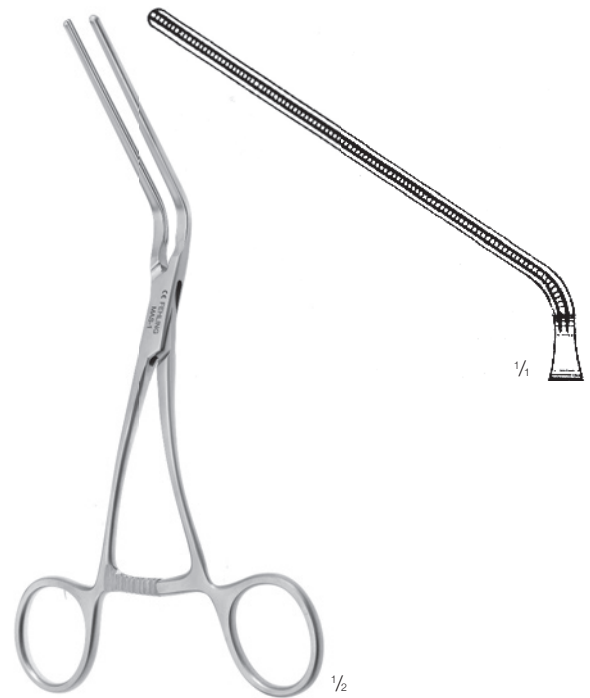
170 mm
MAP-8
MBD-1



165 mm
MAP-9
MBD-8

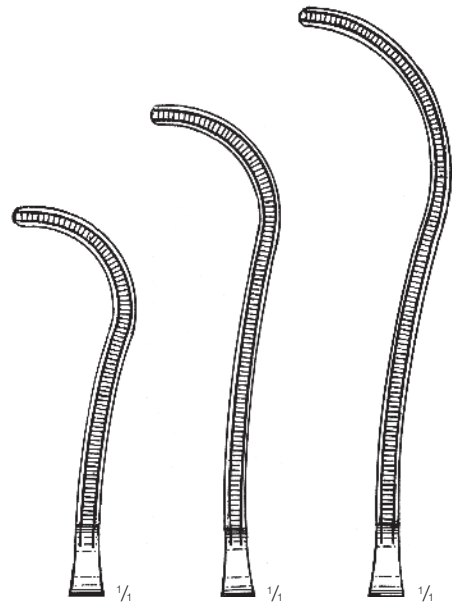


170 mm
MAC-1
MEO-7

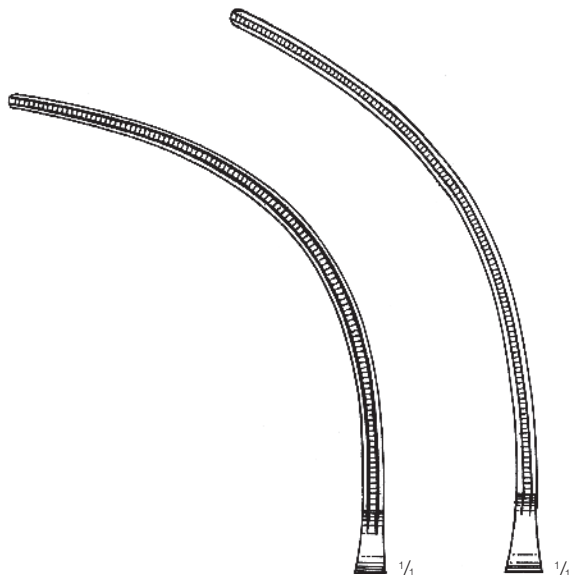


180 mm
MAS-1
MBF-2

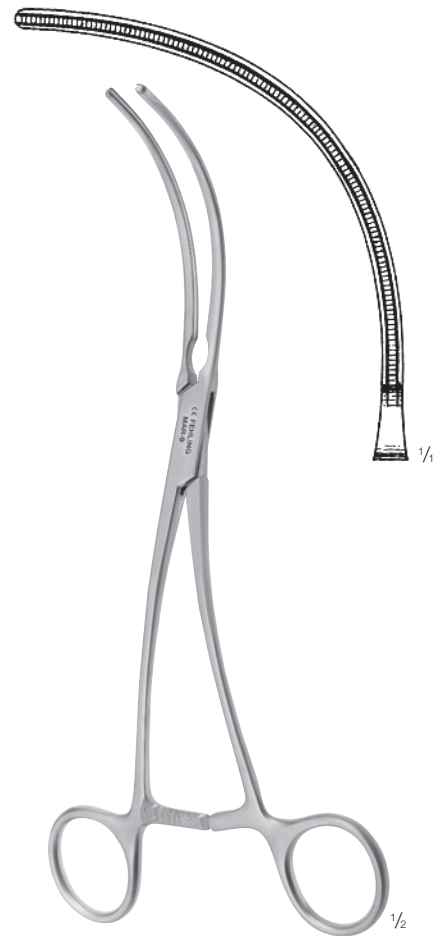
DE BAKEY



200 mm	220 mm	230 mm
MAV-1	MAV-2	MAR-5
MEO-8	MEP-1	MEO-9



185 mm	200 mm
MAR-2	MAR-4
MEP-4	MEP-9

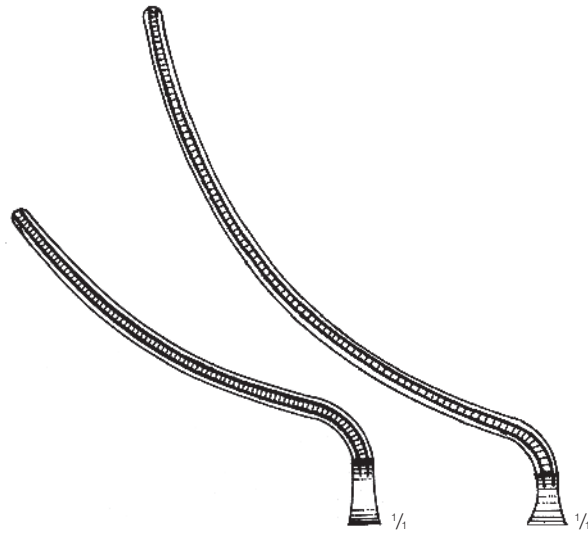


220 mm
MAR-9

WYLIE



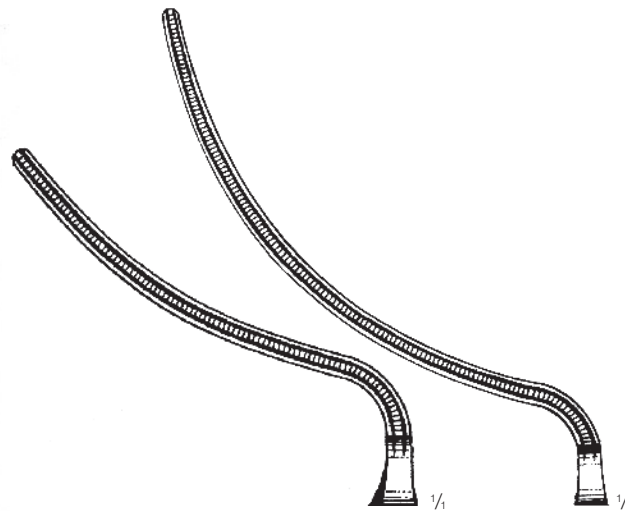
1/2



160 mm	185 mm
MEA-4	MEA-6

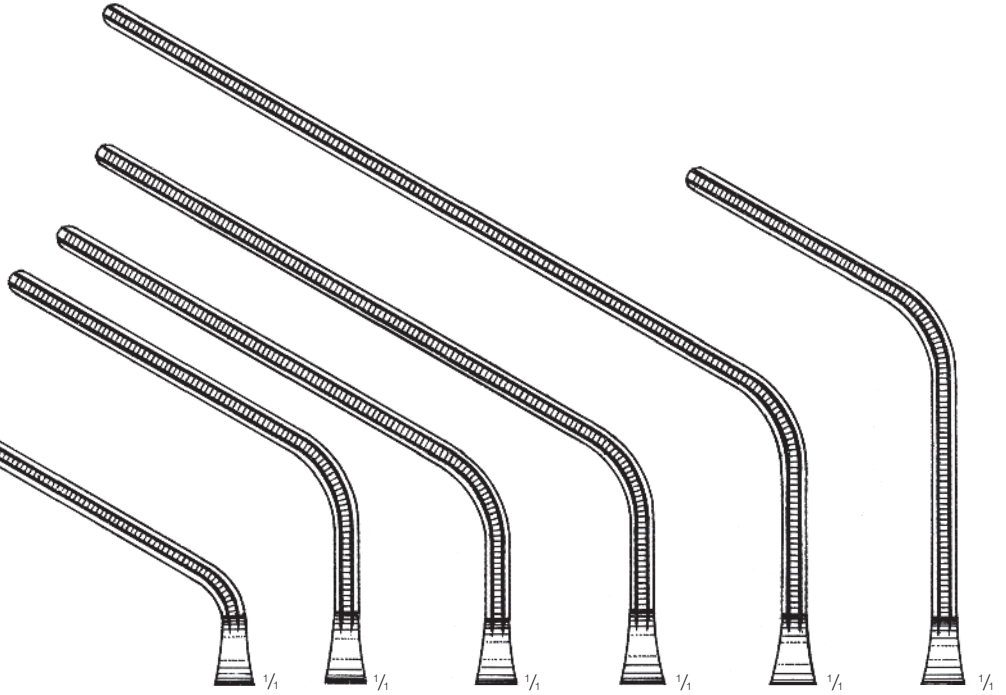


1/2

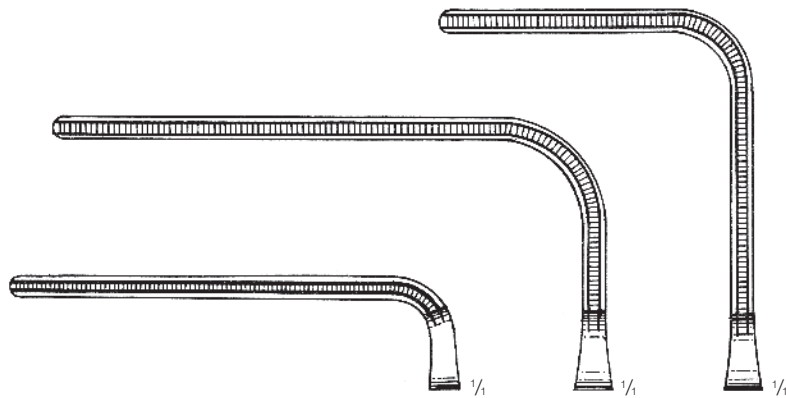


170 mm	200 mm
MEA-5	MEA-7

DE BAKEY



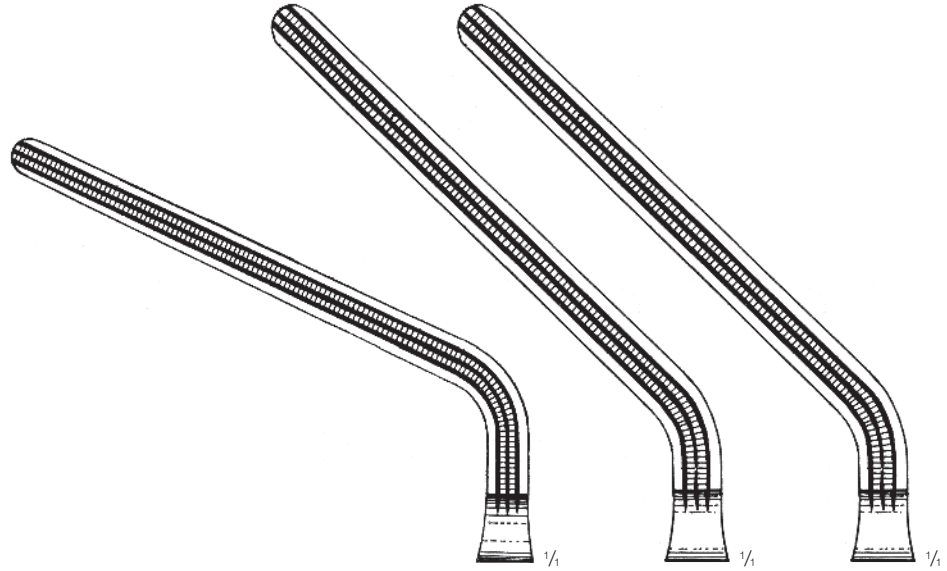
225 mm	230 mm	235 mm	280 mm	310 mm	240 mm
MHD-5	MAS-7	MAS-9	MHD-7	MAT-1	MAS-8



190 mm	255 mm	230 mm
MDV-7	MAS-5	MAS-4



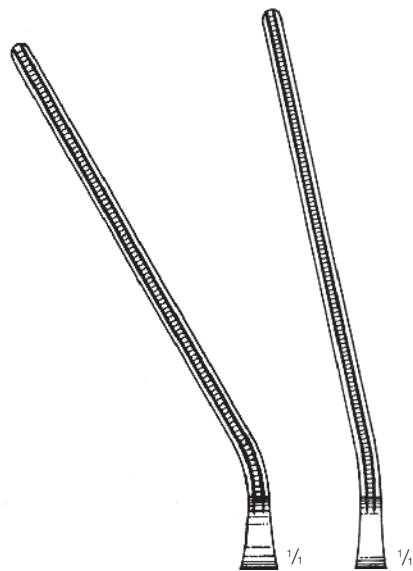
DE BAKEY BORST



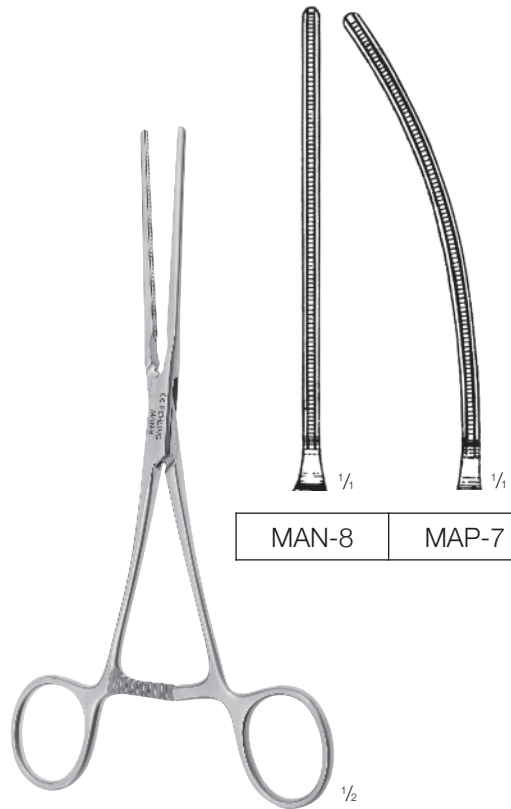
200 mm	230 mm	250 mm
MAU-3	MHF-6	MAU-4



LELAND-JONES
190 mm



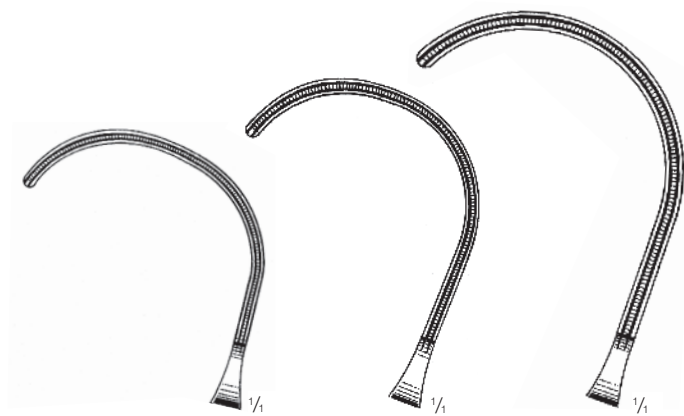
MAZ-5	MAZ-6
MEC-1	MED-6



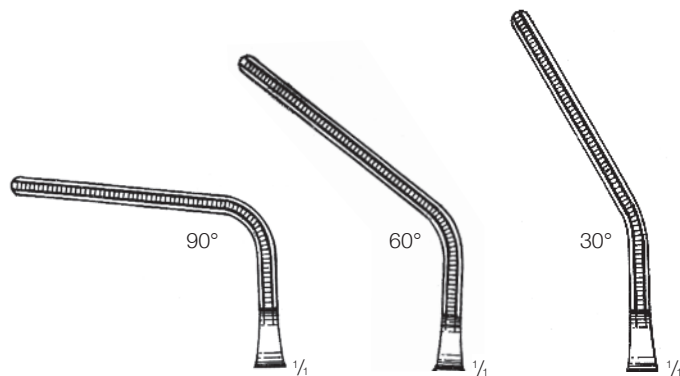
DE BAKEY BAINBRIDGE
180 mm

MAN-8	MAP-7
-------	-------

DE BAKEY

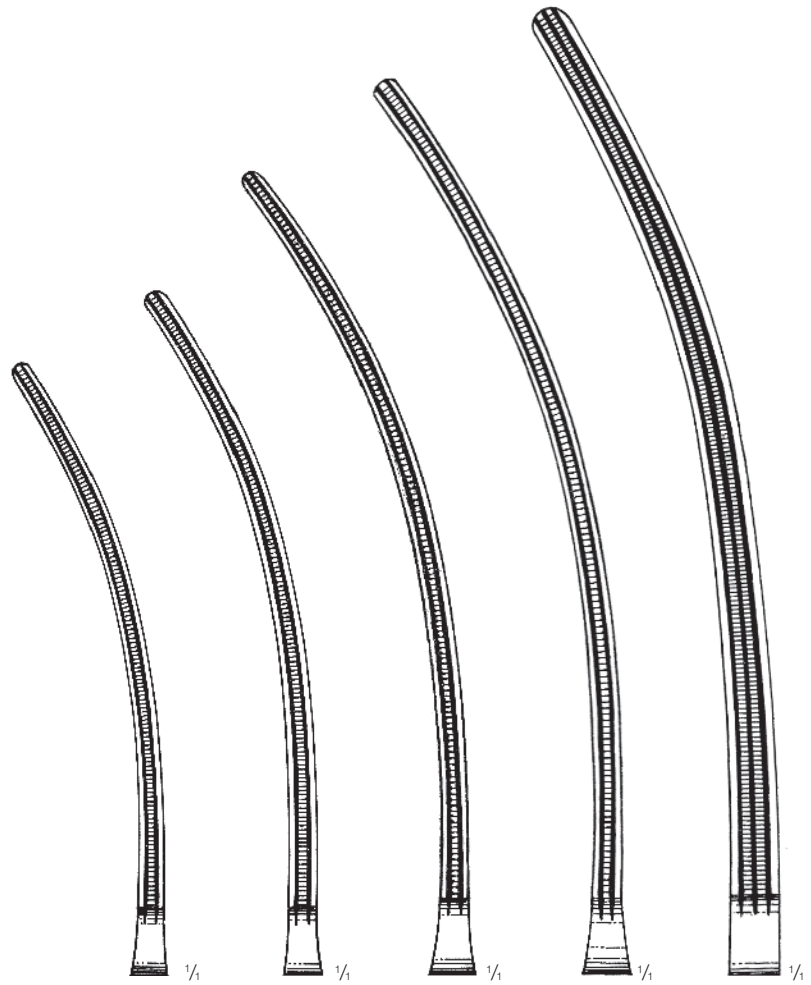


140 mm	160 mm	170 mm
MAX-6	MAX-7	MAX-8



150 mm	160 mm	170 mm
MHC-7	MHC-9	MHC-8
MFR-1	MBF-1	MBE-1

DE BAKEY

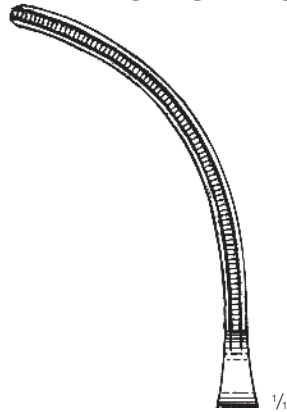


255 mm	265 mm	300 mm	310 mm	2x3 TEETH 2x3 ZÄHNE 320 mm
MAA-9	MAB-1	MAB-2	MAB-3	MFR-6
MFR-2	MFR-3	MFR-4	MFR-5	MEP-8

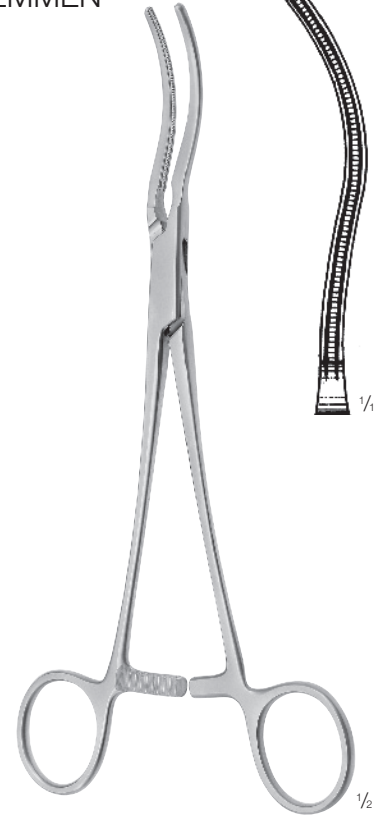
ANEURYSM AND ANASTOMOSIS CLAMPS
ANEURYSMA- UND ANASTOMOSENKLEMMEN



GLOVER
215 mm



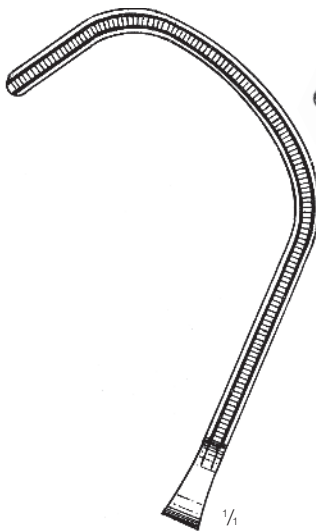
MAY-1
MBD-3



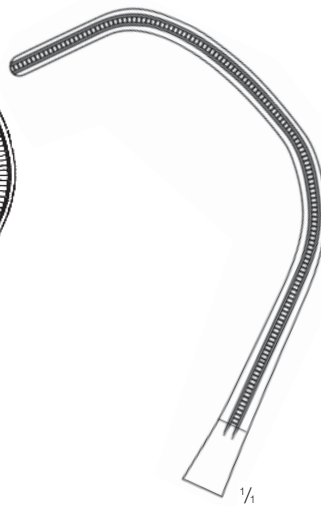
GLOVER
220 mm
MAY-2



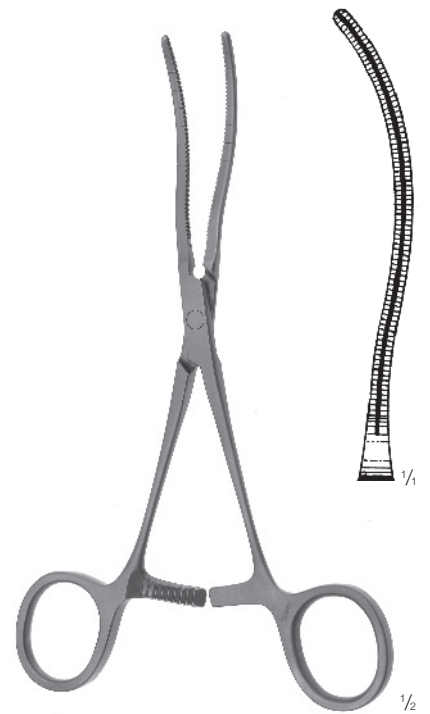
LAMBERT-KAY



200 mm	255 mm
MAU-5	MBA-8



200 mm
MBF-5

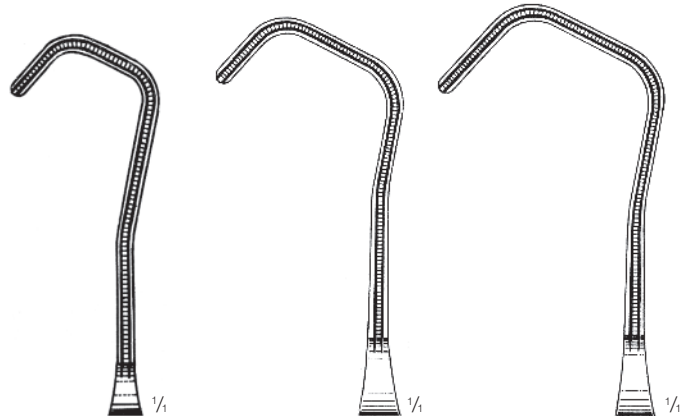


COOLEY
TITANIUM / TITAN
185 mm
MDW-3

ANEURYSM AND ANASTOMOSIS CLAMPS
ANEURYSMA- UND ANASTOMOSENKLEMMEN



DERRA



160 mm	170 mm	180 mm
MAV-5	MAV-4	MAB-9
MBE-2	MBE-3	MBE-4



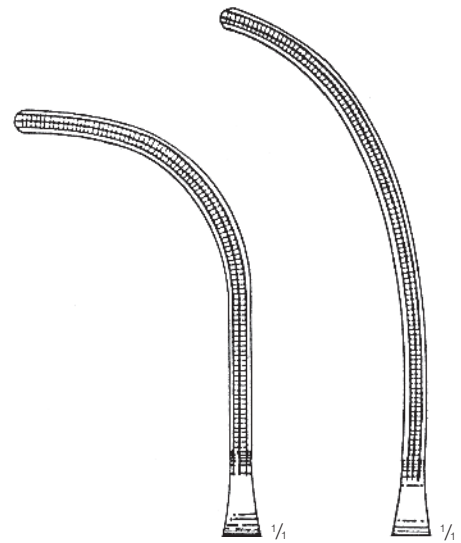
COOLEY
160 mm

MAK-9

TITANIUM
TITAN

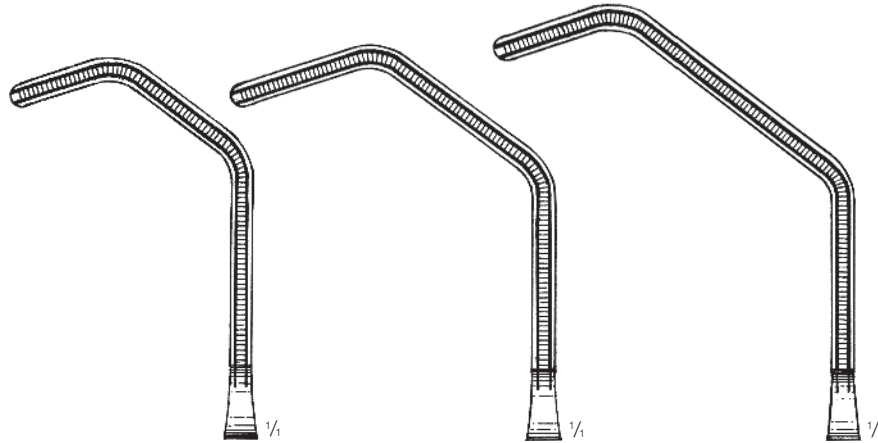


DE BAKEY

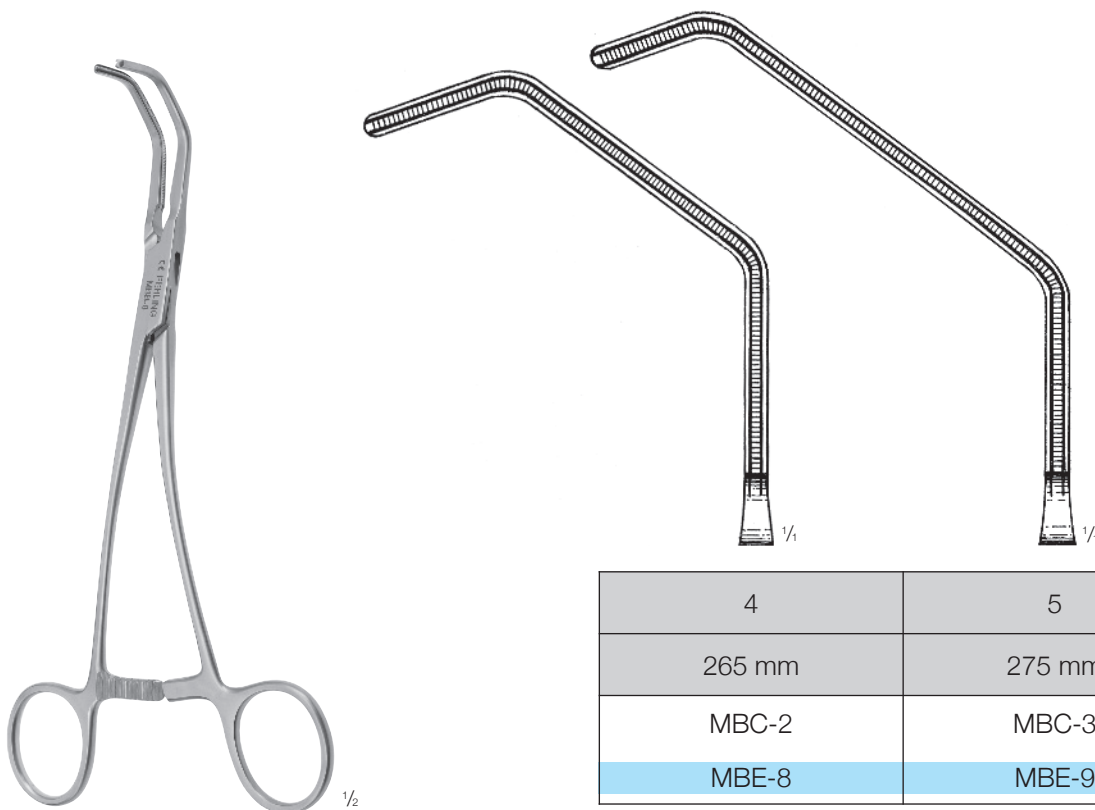


2x3 TEETH / ZÄHNE	
255 mm	265 mm
MKK-9	MKK-8

SATINSKY



1	2	3
210 mm	260 mm	265 mm
MBB-8	MBB-9	MBC-1
MBE-5	MBE-6	MBE-7



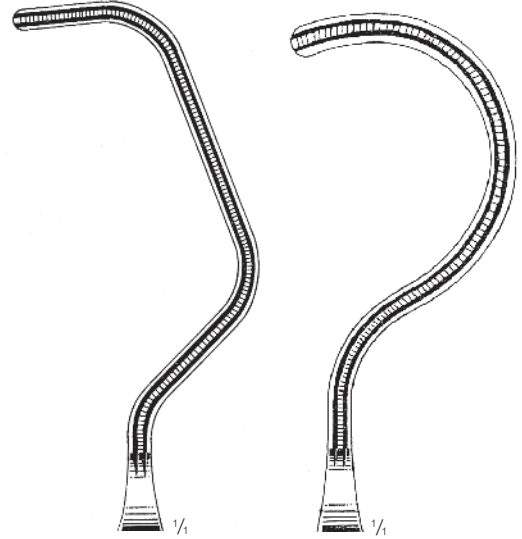
4	5
265 mm	275 mm
MBC-2	MBC-3
MBE-8	MBE-9

ANASTOMOSIS FORCEPS
ANASTOMOSENKLEMMEN



DALE

1/2

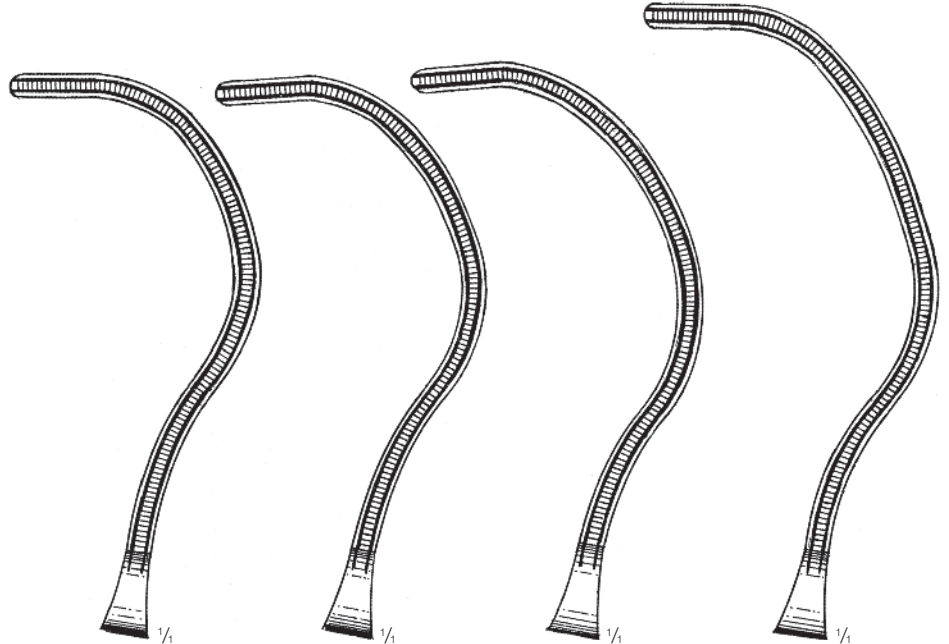


180 mm	190 mm
MAX-2	MAX-3



PARSONETT

1/2

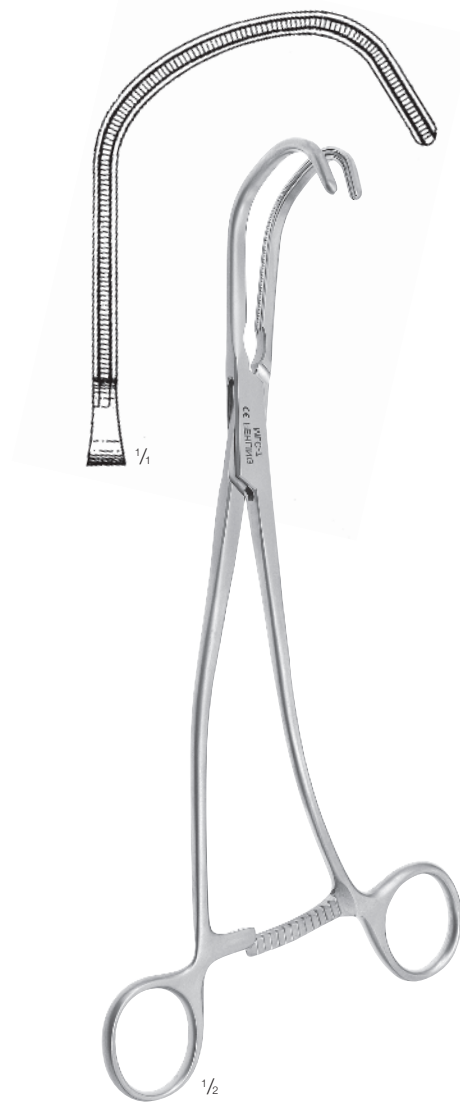


250 mm	260 mm	260 mm	265 mm
MBB-1	MBB-2	MEK-7	MBB-3

ATRIAL / ANASTOMOSIS FORCEPS
VORHOF-/ANASTOMOSENKLEMMEN

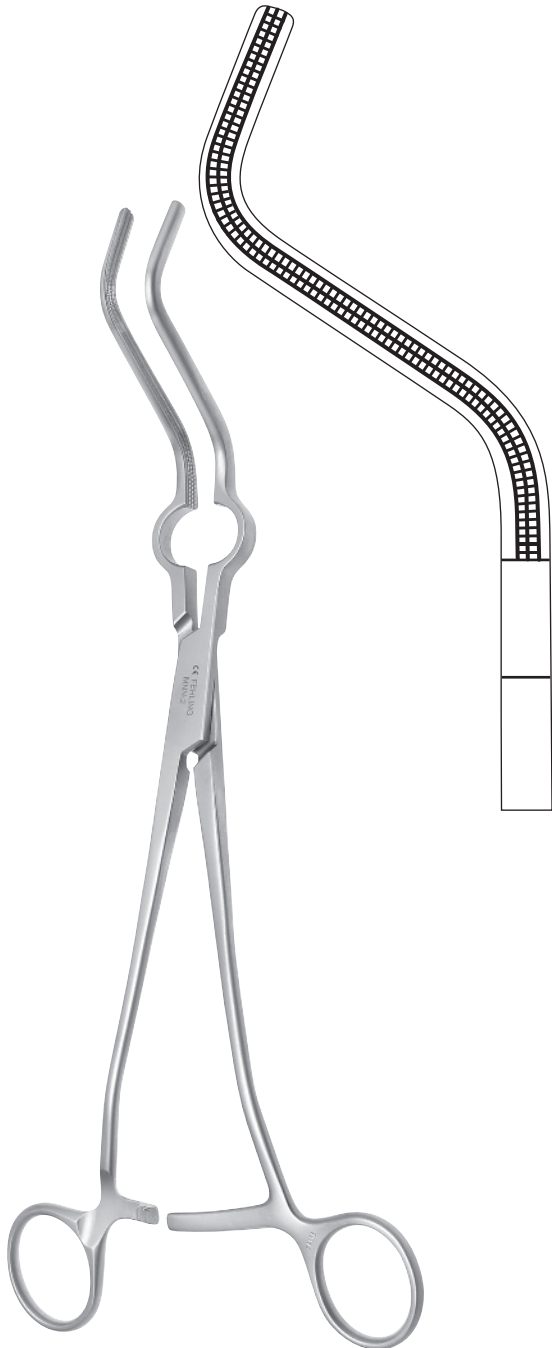


RIGHT PATTERN
RECHTSMODELL
250 mm
MLC-7



LEFT PATTERN
LINKSMODELL
250 mm
MLC-6

CLAMPS FOR THE PARTIAL OCCLUSION OF THE AORTA AND THE AORTIC ARC
KLEMMEN FÜR DEN PARTIELLEN VERSCHLUSS DER AORTA UND DES AORTENBOGENS



BIRNBAUM

JAW LENGTH MAULLÄNGE	TOTAL LENGTH GESAMTLÄNGE	
50 x 30 mm	310 mm	MNN-2
60 x 30 mm	320 mm	MNN-3
70 x 30 mm	330 mm	MNN-4



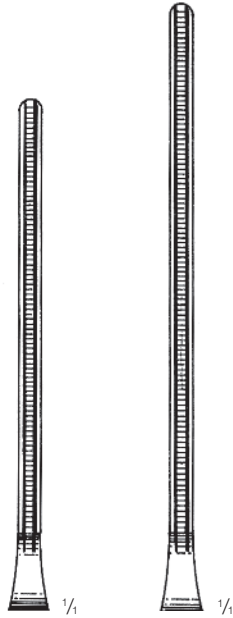
CALAFIORE

JAW LENGTH MAULLÄNGE	TOTAL LENGTH GESAMTLÄNGE	
70 mm	270 mm	MMV-0

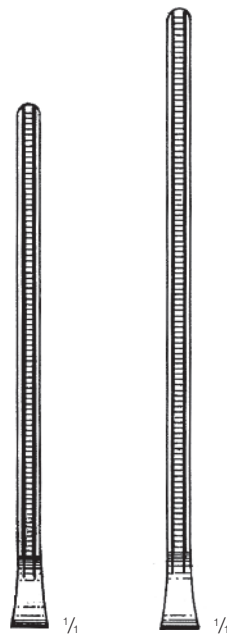
DE BAKEY



COARCTATION FORCEPS
COARCTATIONSKLEMMEN

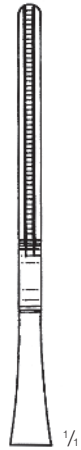


225 mm	240 mm
MAP-2	MAP-3
MBD-2	-



225 mm	240 mm
MAU-8	MAU-9





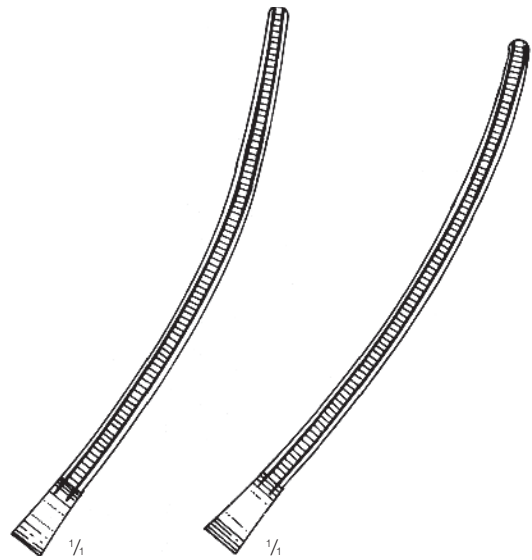
MEE-4
MEP-2

PATENT-DUCTUS-FORCEPS
PATENT-DUCTUS-KLEMMEN
220 mm



MEE-3

PATENT-DUCTUS-FORCEPS
PATENT-DUCTUS-KLEMMEN
210 mm



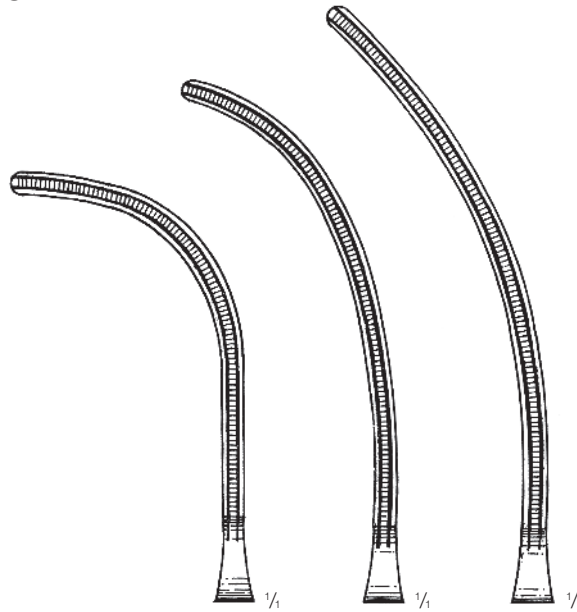
240 mm	270 mm
MBG-7	MDY-9

WYLIE
AORTIC FORCEPS
AORTENKLEMMEN

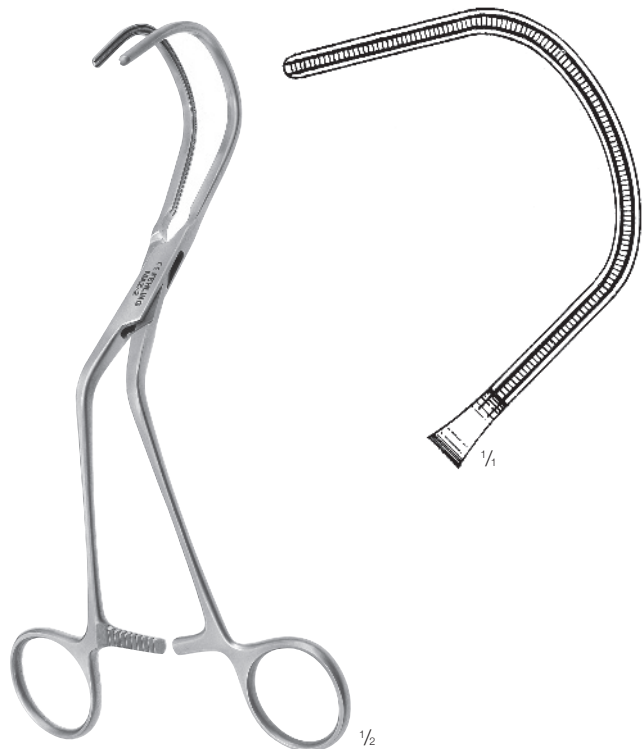
AORTIC CLAMPS
AORTENKLEMMEN



DE BAKEY



255 mm	265 mm	280 mm
MAT-7	MAT-8	MAT-9
MER-1	MER-2	MEZ-6



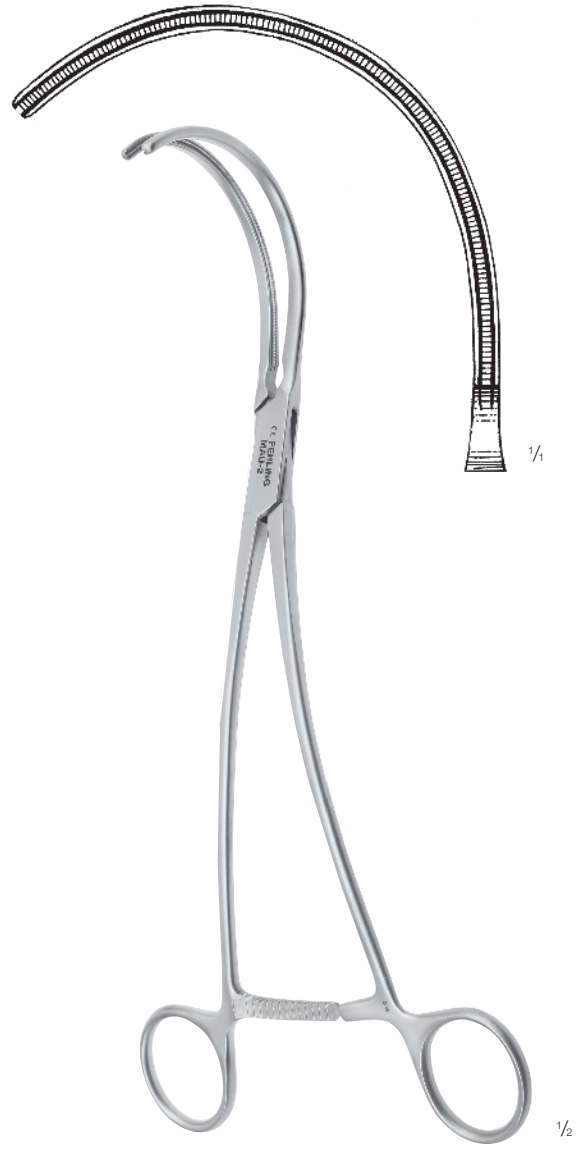
KAY
200 mm
MAZ-2

DE BAKEY

AORTIC CLAMPS
AORTENKLEMMEN



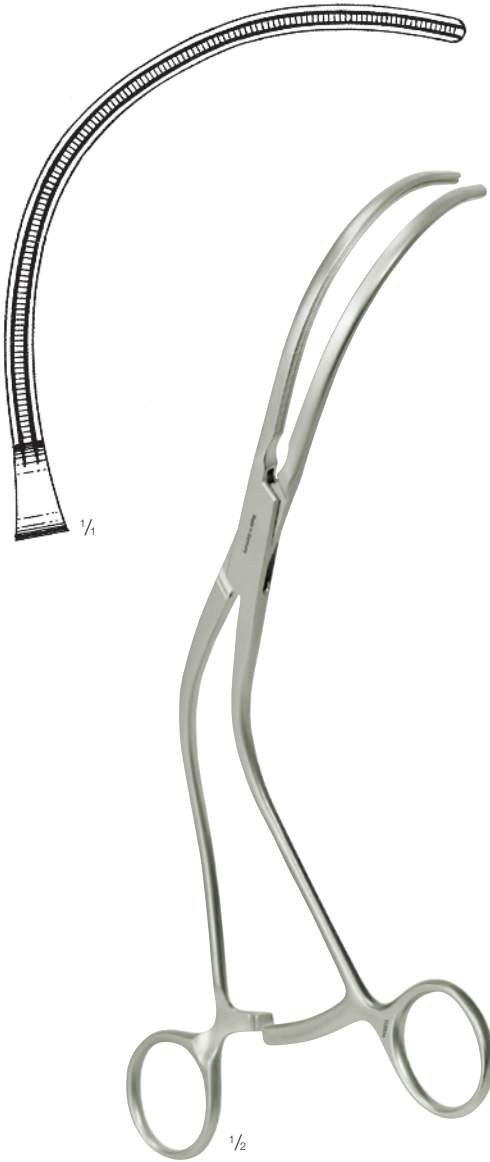
300 mm
MAU-1



270 mm
MAU-2

WEBER

VENA CAVA CLAMPS
VENA CAVA KLEMMEN



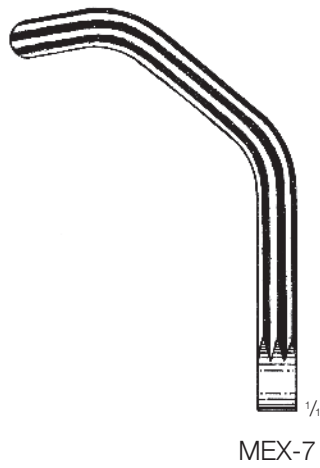
RIGHT PATTERN
RECHTSMODELL
260 mm
ZAU-3



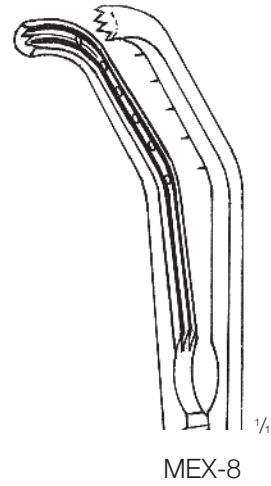
LEFT PATTERN
LINKSMODELL
260 mm
ZAU-2



PRICE THOMAS
BRONCHUS FORCEPS
BRONCHUSKLEMMEN
220 mm



MEX-7



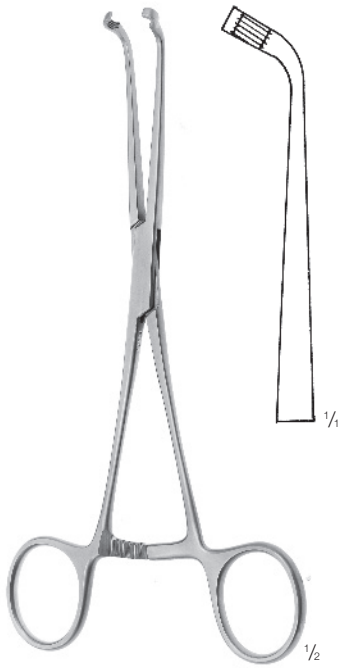
MEX-8



HACKER
LOOP FORCEPS
UMFÜHRUNGSKLEMME
250 mm
ZBZ-0





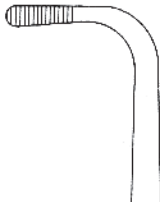
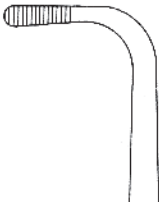
GUYON
LOOP FORCEPS
UMFÜHRUNGSKLEMME
250 mm
ZBZ-3



PRICE THOMAS
CATHETER INTRODUCING FORCEPS
KATHETEREINFÜHRZANGE
170 mm
MCP-7



WATERSTON

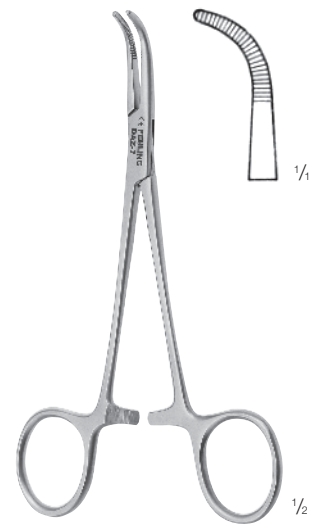
			
180 mm	210 mm	170 mm	200 mm
DAY-7	DAY-9	DAY-6	DAY-8



BABY-ADSON
185 mm
DAZ-8



BABY-ADSON
185 mm
DCG-8

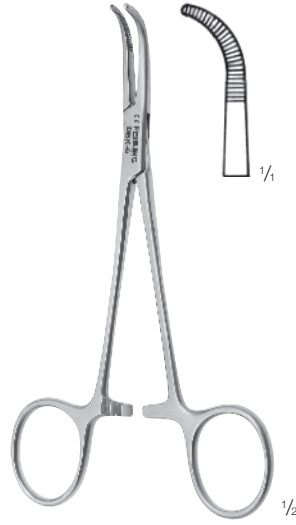


BABY-ADSON
140 mm
DAZ-7

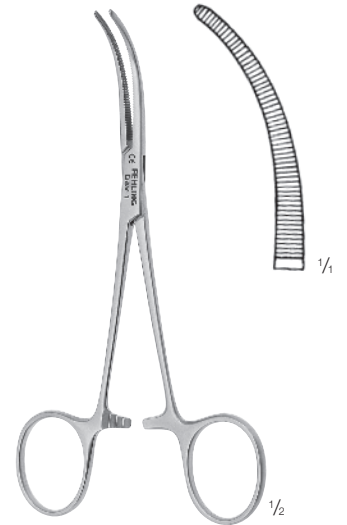


150 mm	210 mm
DAW-0	DAV-0

CERAMO® RONDO
MICRO LIGATURE FORCEPS
MIKROLIGATURKLEMME



MICRO-ADSON
140 mm
DBK-6



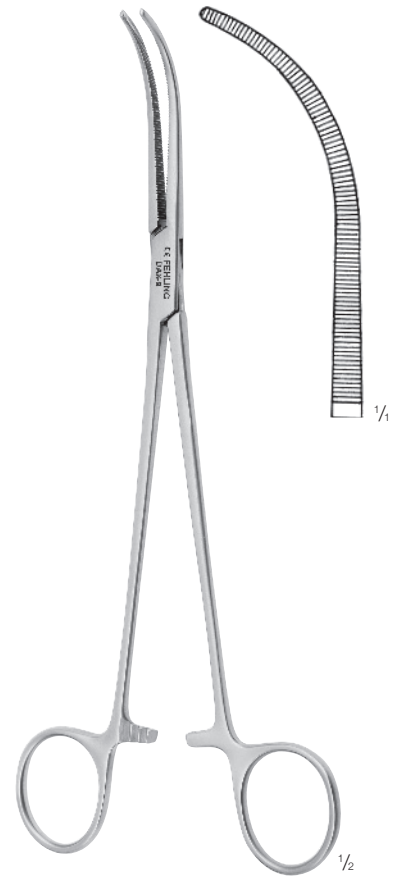
BABY-OVERHOLT
135 mm
DAV-1



BABY-MIXTER
140 mm
DBA-1



BABY-MIXTER
180 mm
DBA-2

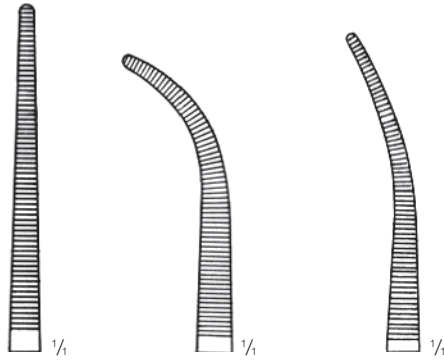


OVERHOLT-MIXTER
230 mm
DAX-9



HEISS

1/2

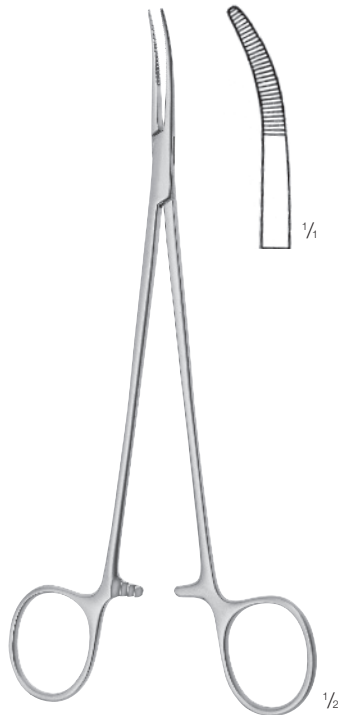


200 mm	205 mm	205 mm
DAG-1	DAG-3	DAG-4



MIXTER-O'SHAUGNESSY
190 mm
DCA-4

1/2



NISSEN
190 mm
DAL-6

1/2

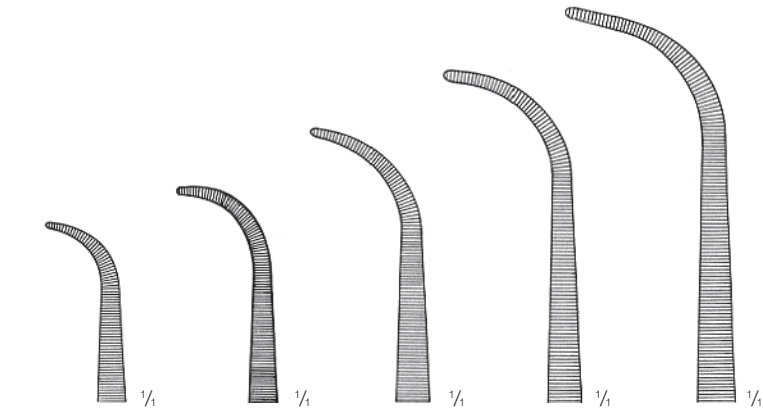


WIKSTROEM
210 mm
DAZ-1

1/2



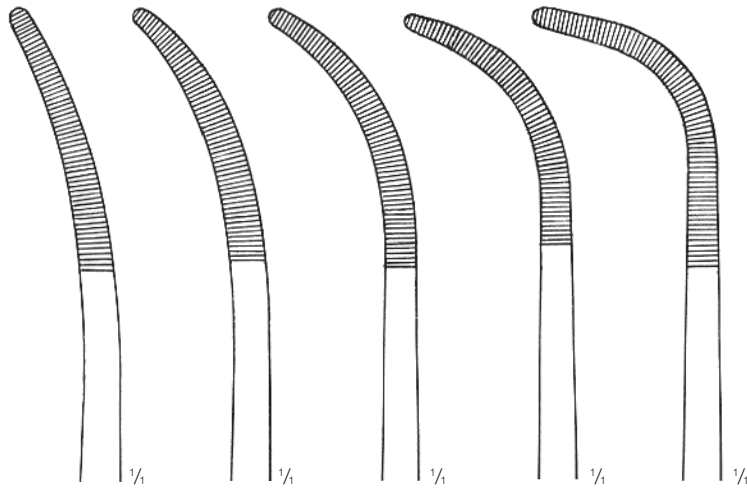
GEMINI



140 mm	180 mm	200 mm	230 mm	280 mm
DAV-2	DAV-3	DAV-4	DAV-5	DAV-6



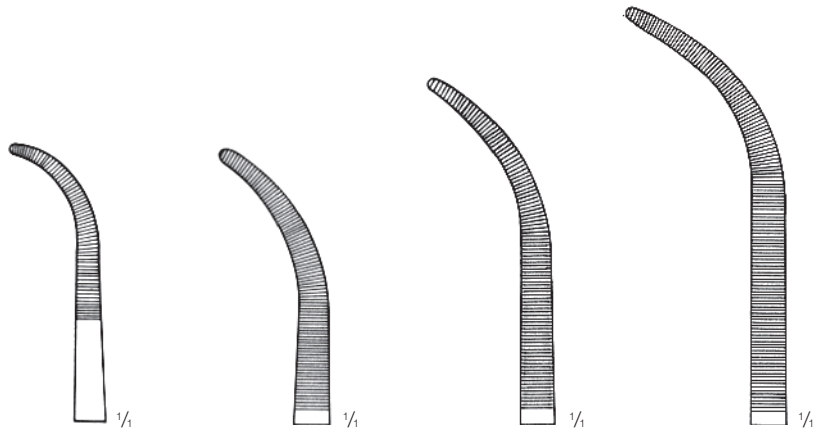
RUMEL



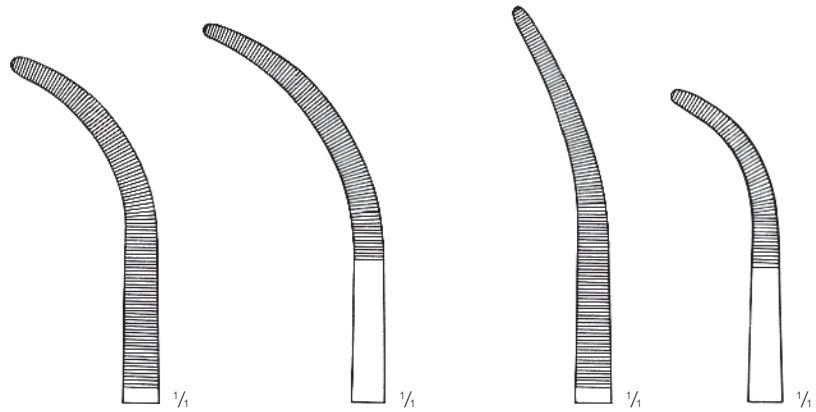
1	2	3	4	5
240 mm	240 mm	250 mm	240 mm	240 mm
DBK-7	DBK-8	DBK-9	DBL-1	DBL-2



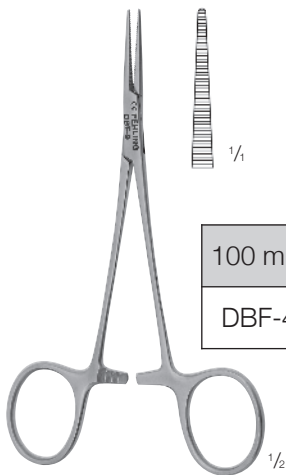
OVERHOLT-GEISSENDOERFER



190 mm	270 mm	200 mm	270 mm	210 mm	270 mm	220 mm	270 mm
DAW-3	DAX-1	DAW-4	DAX-2	DAW-5	DAX-3	DAW-6	DAX-4



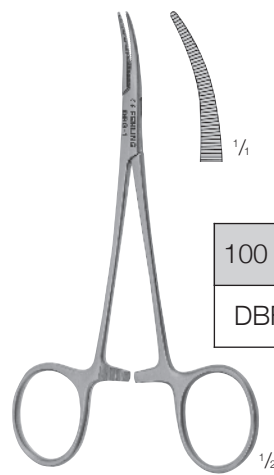
215 mm	270 mm	220 mm	270 mm	225 mm	270 mm	215 mm
DAW-7	DAX-5	DAW-8	DAX-6	DAW-9	DAX-7	ZAL-7



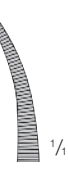
MICRO/MIKRO
MOSQUITO



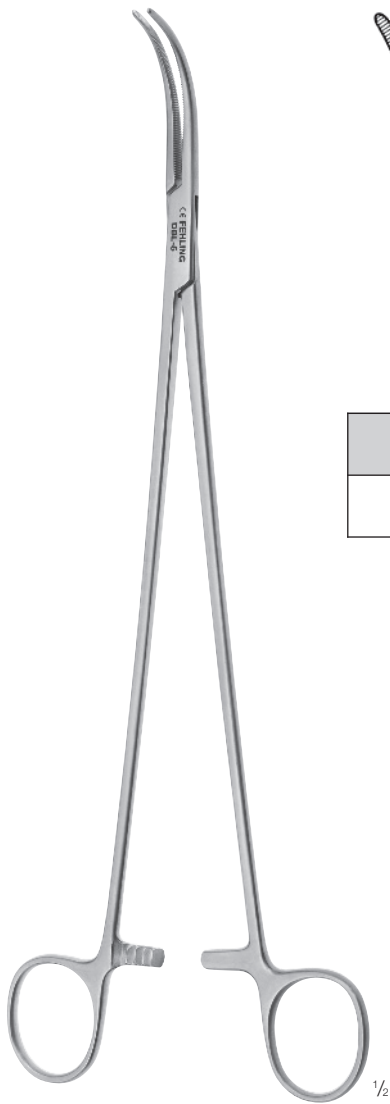
100 mm	120 mm
DBF-4	DBF-9



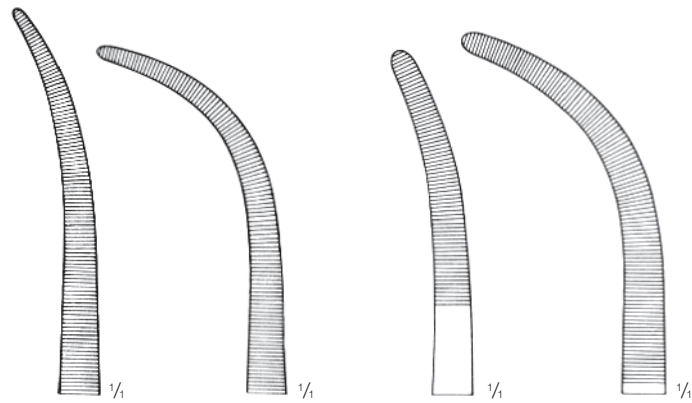
MICRO/MIKRO
MOSQUITO



100 mm	120 mm
DBF-5	DBG-1



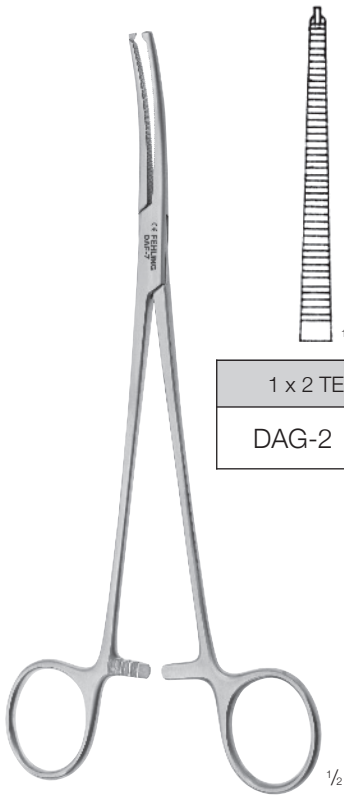
ZENKER



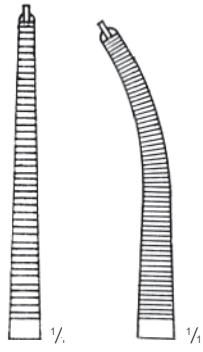
300 mm	285 mm	300 mm	300 mm
DBL-4	DBL-5	ZCD-9	ZCE-1



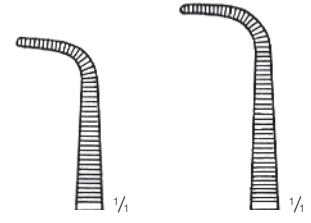
LIVERCLAMP
LEBERKLEMME
260 mm
PAF-0



HEISS
210 mm



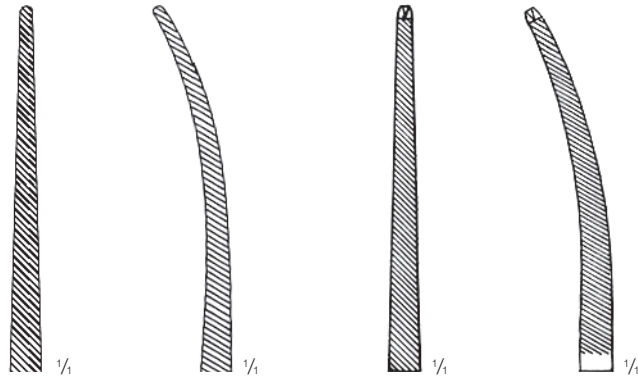
1 x 2 TEETH / ZÄHNE	
DAG-2	DAF-7



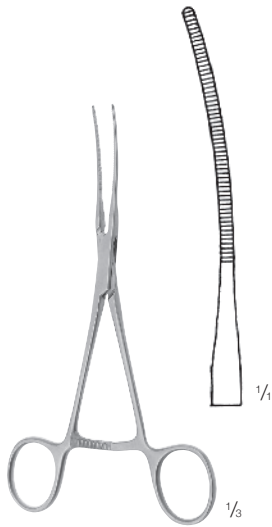
140 mm	180 mm
DAD-6	DAD-7



BENGOLEA



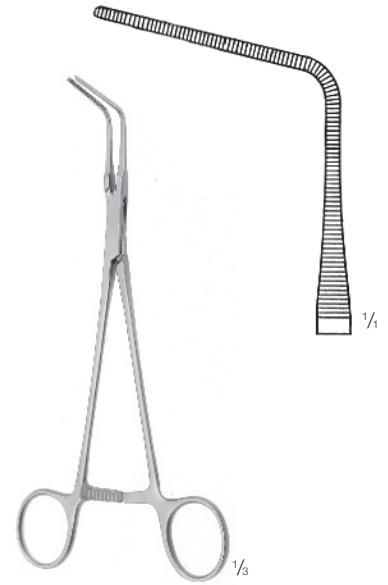
	1 x 2 TEETH / 1 x 2 ZÄHNE			
240 mm	DAA-6	DAA-7	DBZ-8	DAB-2
260 mm	DCC-8	DAA-9	DCC-6	DCC-7



MILLS
165 mm
MFF-8



MILLS
190 mm
MFF-7



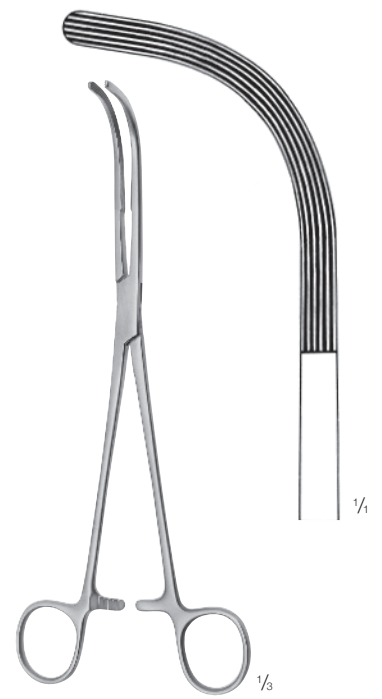
MILLS
195 mm
MFF-6



RUMEL
230 mm
ZAH-5



CRAFOORD
240 mm
DAB-8



DE BAKY-CRAFOORD
245 mm
MAU-7

ALLIS



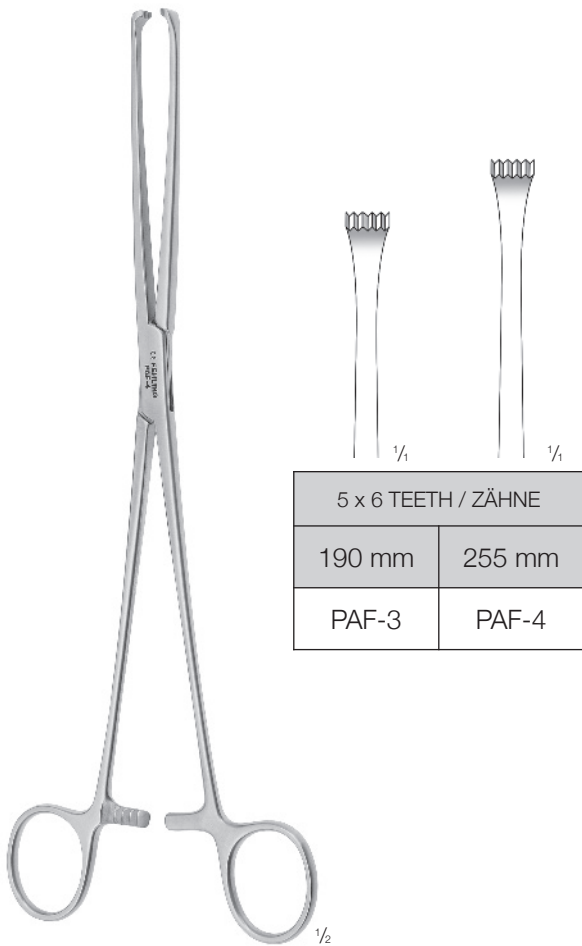
4 x 5 TEETH
4 x 5 ZÄHNE

155 mm
PAF-1



5 x 6 TEETH
5 x 6 ZÄHNE






155 mm
PAF-2



5 x 6 TEETH / ZÄHNE	
190 mm	255 mm
PAF-3	PAF-4


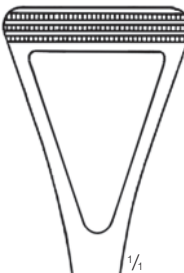


ALLIS
NON-TRAUMATIC
ATRAUMATISCH

				
155 mm	190 mm	230 mm	255 mm	300 mm
PAF-9	PAG-1	PAG-2	PAG-3	PAG-4

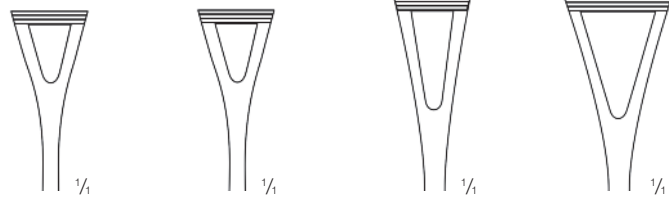


SCHEIBE

	
205 mm	230 mm
PAJ-4	PAJ-5



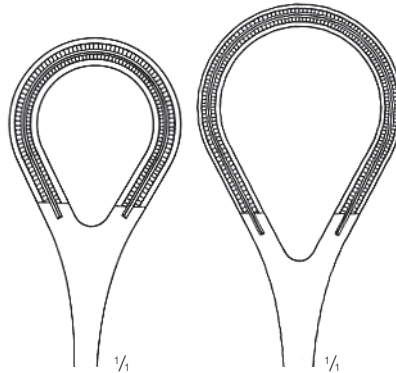
BABCOCK



160 mm	170 mm	215 mm	240 mm
PAG-5	PAG-6	PAG-7	PAG-8



NON-TRAUMATIC
ATRAUMATISCH

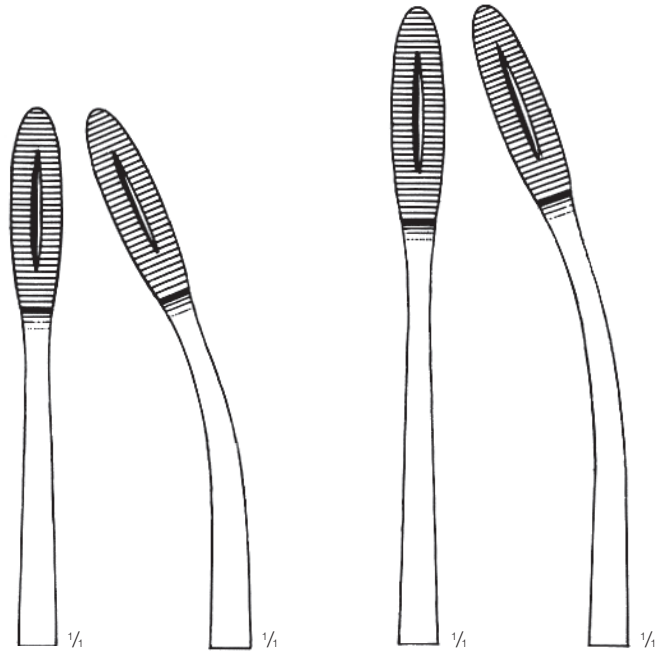


240 mm	270 mm
PAF-7	PAF-8



GROSS-MAIER

$\frac{1}{2}$

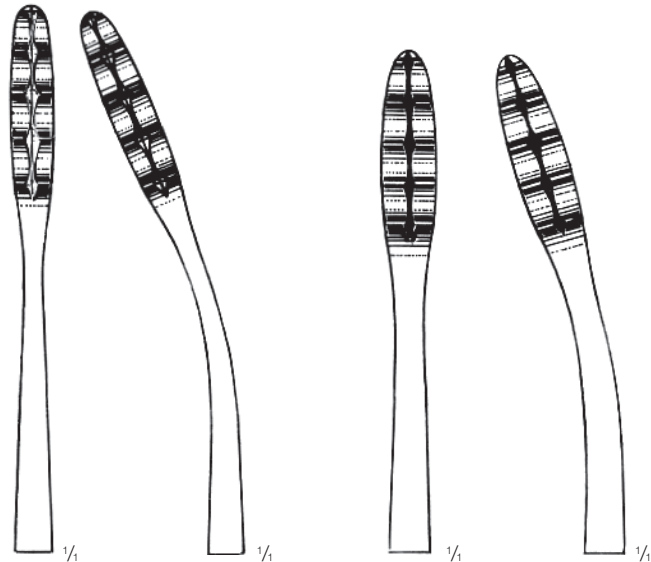


200 mm	200 mm	260 mm	260 mm
DBV-6	DBW-1	DBV-9	DBW-3

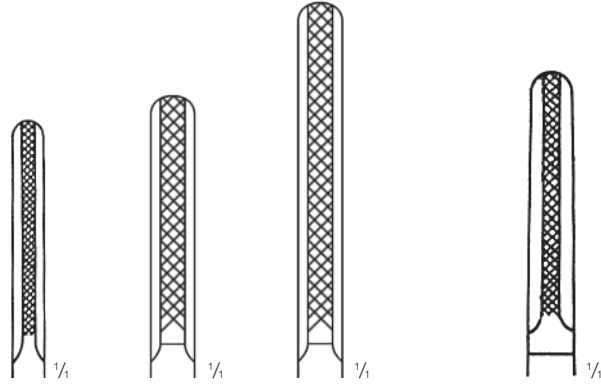


ULRICH

$\frac{1}{3}$



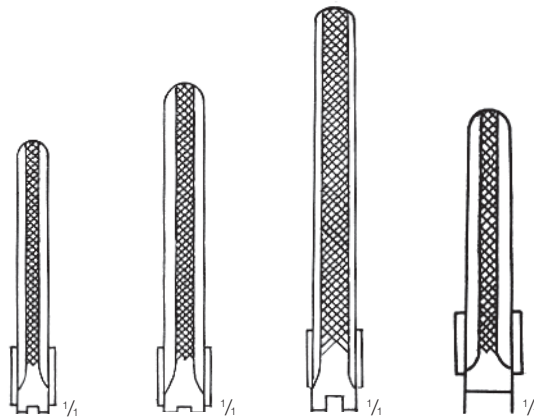
220 mm	220 mm	265 mm	265 mm
DBY-5	DBY-8	DBY-7	DBZ-1



STANDARD			STRONG / STARK	
150 mm	180 mm	200 mm	190 mm	200 mm
ZAM-4	ZAM-3	DBM-2	DCG-9	DCN-6



WITH SAFETY GUARD
MIT SCHUTZBÜGEL



STANDARD			STRONG STARK
155 mm	180 mm	200 mm	190 m
DCB-6	DCB-7	DCB-8	DCH-1



FOR PAPER TOWELS
FÜR PAPIERTÜCHER



135 mm
DBP-5



145 mm
DCM-7

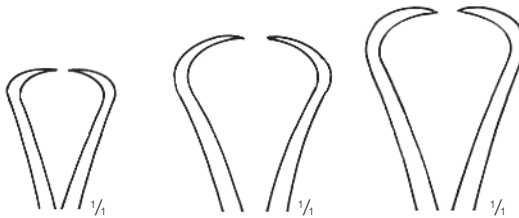


145 mm
DCM-8

for 1/2 inch tube
für 1/2 Zoll-Schlauch



BACKHAUS



90 mm	110 mm	130 mm
DBM-5	DBM-6	DBM-7

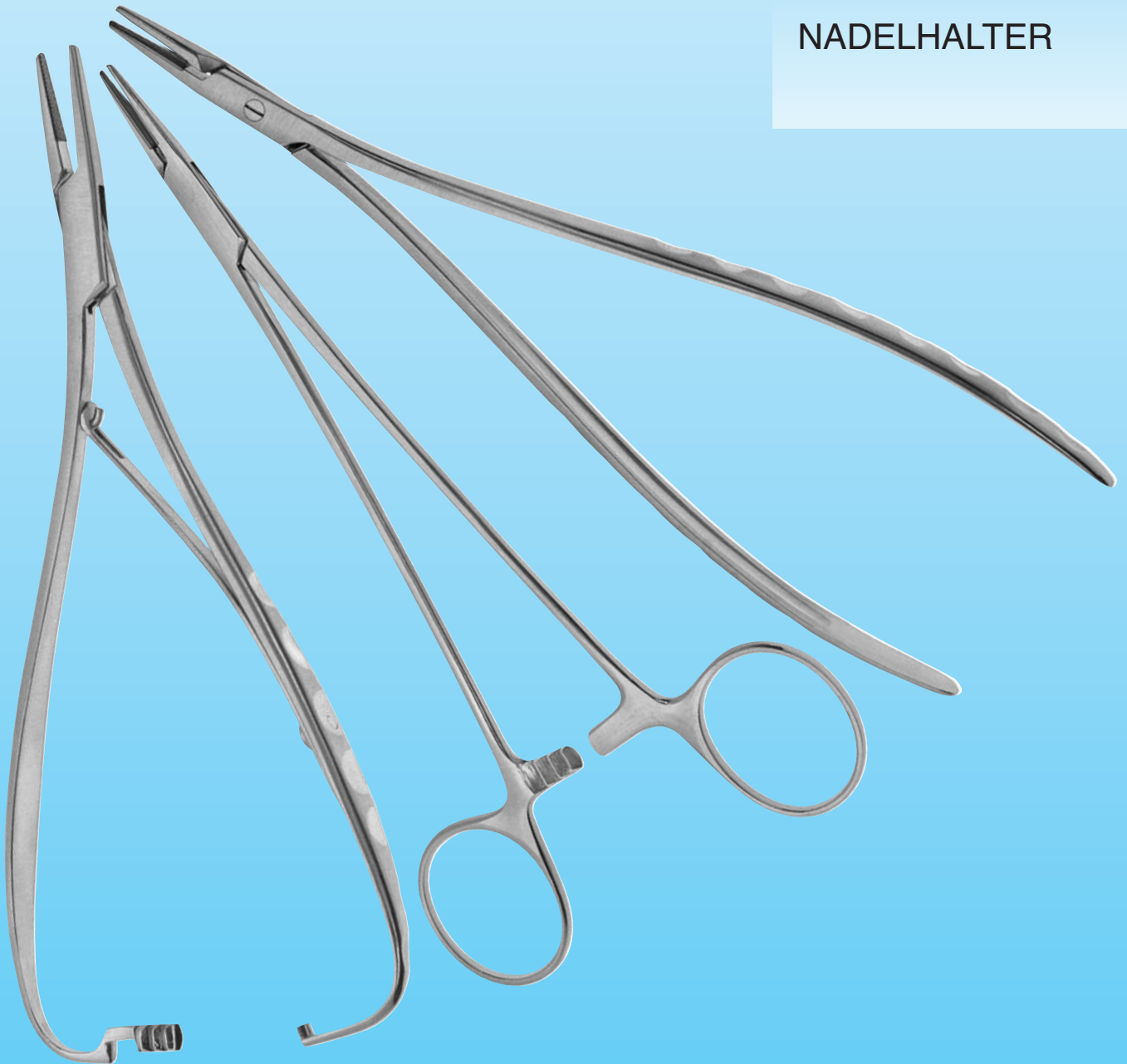
FEHLING...

... THE DIFFERENCE

5

NEEDLE HOLDERS

NADELHALTER



FEHLING
INSTRUMENTS

Hanauer Landstraße 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49 (0) 61 88 - 95 74.40



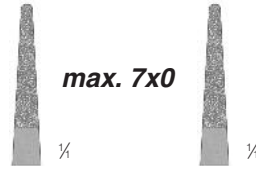
+49 (0) 61 88 - 95 74.45



info@fehling-instruments.de



TCM
VASCULAR



LENGTH LÄNGE	STEEL STAHL	TITANIUM TITAN
125 mm	KKA-1	KKB-1
145 mm	KKA-2	KKB-2
175 mm	KKA-3	KKB-3
200 mm	KKA-4	KKB-4
225 mm	KKA-5	KKB-5



PLASMA
MIKRO-RYDER



LENGTH LÄNGE	STRAIGHT GERADE	CURVED GEBOGEN
130 mm	KOR-0	
150 mm	KOR-2	
180 mm	KOR-4	KOR-5
200 mm	KOR-6	
230 mm	KOR-8	KOR-9

**PLEASE FIND MICRO NEEDLE HOLDERS IN CATALOGUE No. 1
MIKRONADELHALTER FINDEN SIE IN KATALOG Nr. 1**



PLASMA
EUPHRATE

max. 5x0



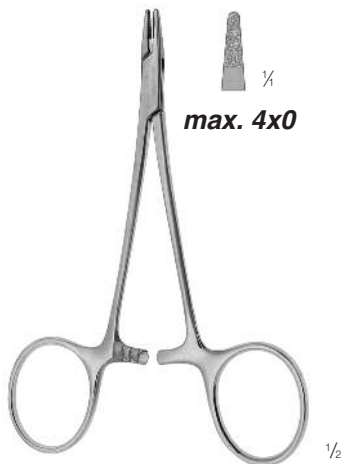
LENGTH LÄNGE	STRAIGHT GERADE
150 mm	KKD-1
175 mm	KKD-2
200 mm	KKD-3
230 mm	KKD-4



PLASMA
CRILE

150 mm
KOH-3

max. 4x0



PLASMA
DERF

120 mm
KOH-6

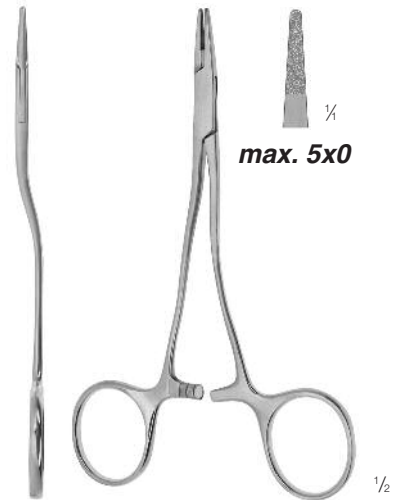
max. 4x0



PLASMA
HALSEY

130 mm
KOH-2

max. 4x0



PLASMA
KILNER

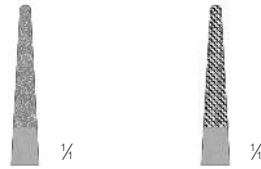
135 mm
KOH-4

max. 5x0





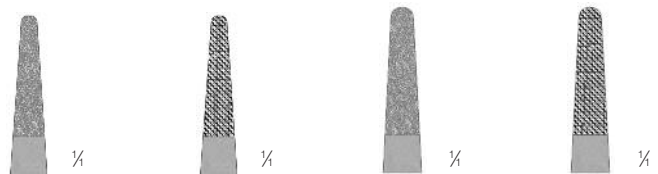
DE BAKEY



LENGTH LÄNGE	PLASMA <i>max. 4x0</i>	TC <i>max. 4x0</i>
165 mm	KOG-1	KAG-8
180 mm	KOG-2	KAG-9
200 mm	KOG-3	KAH-1
230 mm	KOG-4	KAH-2
260 mm	KOG-5	KAH-3
310 mm	KOG-6	KAH-4



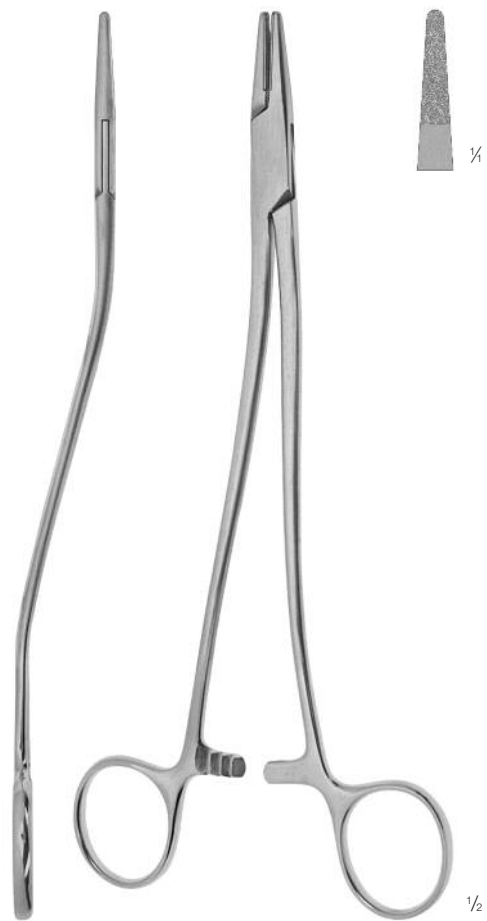
MAYO-HEGAR



LENGTH LÄNGE	STANDARD		STRONG PATTERNS STARKE MODELLE	
	PLASMA <i>max. 2x0</i>	TC <i>max. 1x0</i>	PLASMA <i>max. 1x0</i>	TC <i>unlim.</i>
150 mm	KOF-1	KAP-4		
160 mm	KOF-2	KAP-5		
180 mm	KOF-3	KAP-6		KAL-0
200 mm	KOF-4	KAP-7	KOF-8	KAL-6
240 mm	KOF-5	KAP-8	KOF-9	KCP-5
260 mm	KOF-6	KAP-9		
300 mm	KOF-7	KAR-1		KCP-0



WANGENSTEEN



WERTHEIM

LENGTH LÄNGE	PLASMA <i>max. 2x0</i>	TC <i>max. 1x0</i>
240 mm	KOS-1	KAV-4
275 mm	KOS-2	KAV-5

LENGTH LÄNGE	PLASMA <i>max. 2x0</i>	TC <i>max. 1x0</i>
200 mm	KOS-3	KBG-1
240 mm	KOS-4	KBG-2
300 mm	KOS-5	KBG-0



TOENNIS
180 mm

PLASMA <i>max. 2x0</i>	TC <i>max. 2x0</i>
KOO-1	KAV-3



LANGENBECK-RYDER
200 mm

PLASMA <i>max. 5x0</i>	TC <i>max. 5x0</i>
KOO-2	KAL-8

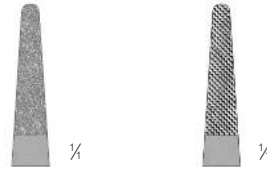


LANGENBECK
200 mm

PLASMA <i>max. 2x0</i>	TC <i>max. 2x0</i>
KOO-3	KAM-1



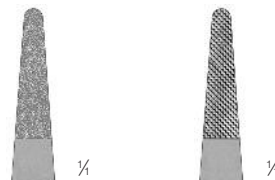
MATHIEU



LENGTH LÄNGE	PLASMA <i>max. 2x0</i>	TC <i>max. 1x0</i>
140 mm	KOP-1	KAN-3
170 mm	KOP-2	KAN-4
200 mm	–	KAN-5



ZWEIFEL



LENGTH LÄNGE	PLASMA <i>max. 2x0</i>	TC <i>max. 1x0</i>
200 mm	KOO-4	KAV-6
230 mm	KOO-5	KAV-7



STRATTE



HEANEY
200 mm

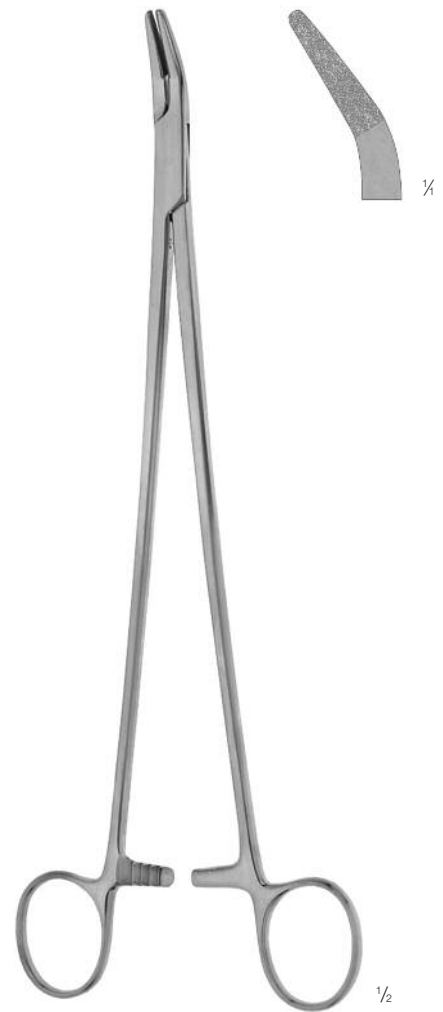
LENGTH LÄNGE	PLASMA <i>max. 2x0</i>	TC <i>max. 2x0</i>
210 mm	KON-6	KCE-9
230 mm	KON-7	KAU-9
270 mm	KON-8	KAV-1

PLASMA <i>max. 1x0</i>	TC <i>max. 1x0</i>
KOS-6	KAF-0



MASSON
265 mm

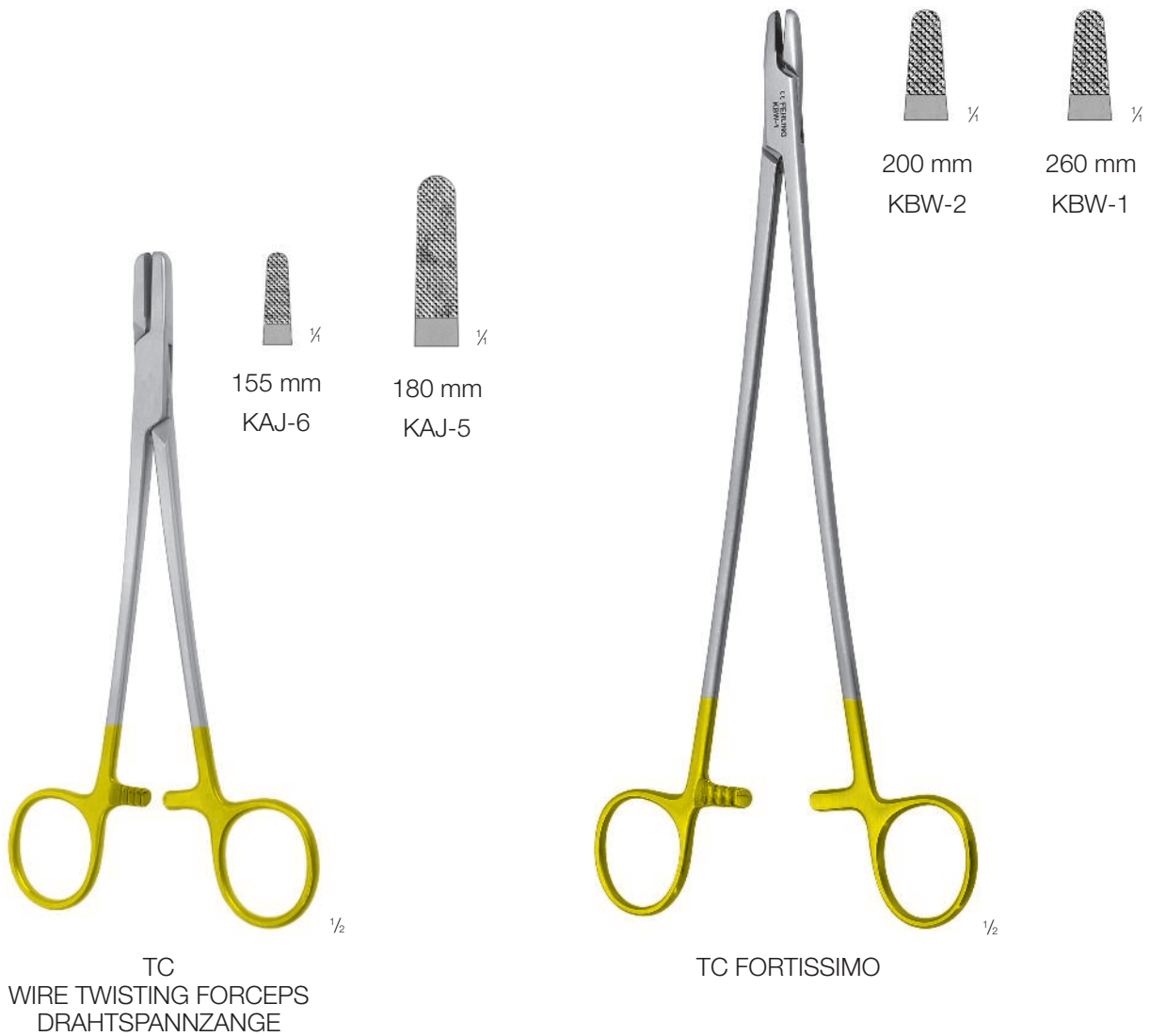
PLASMA max. 1x0	TC max. 1x0
KOS-7	KAM-7



FINOCHIETTO
265 mm

PLASMA max. 4x0	TC max. 4x0
KOS-8	KAK-4

PLEASE FIND MICRO NEEDLE HOLDERS IN CATALOGUE No. 1
MIKRONADELHALTER FINDEN SIE IN KATALOG Nr. 1



FEHLING...

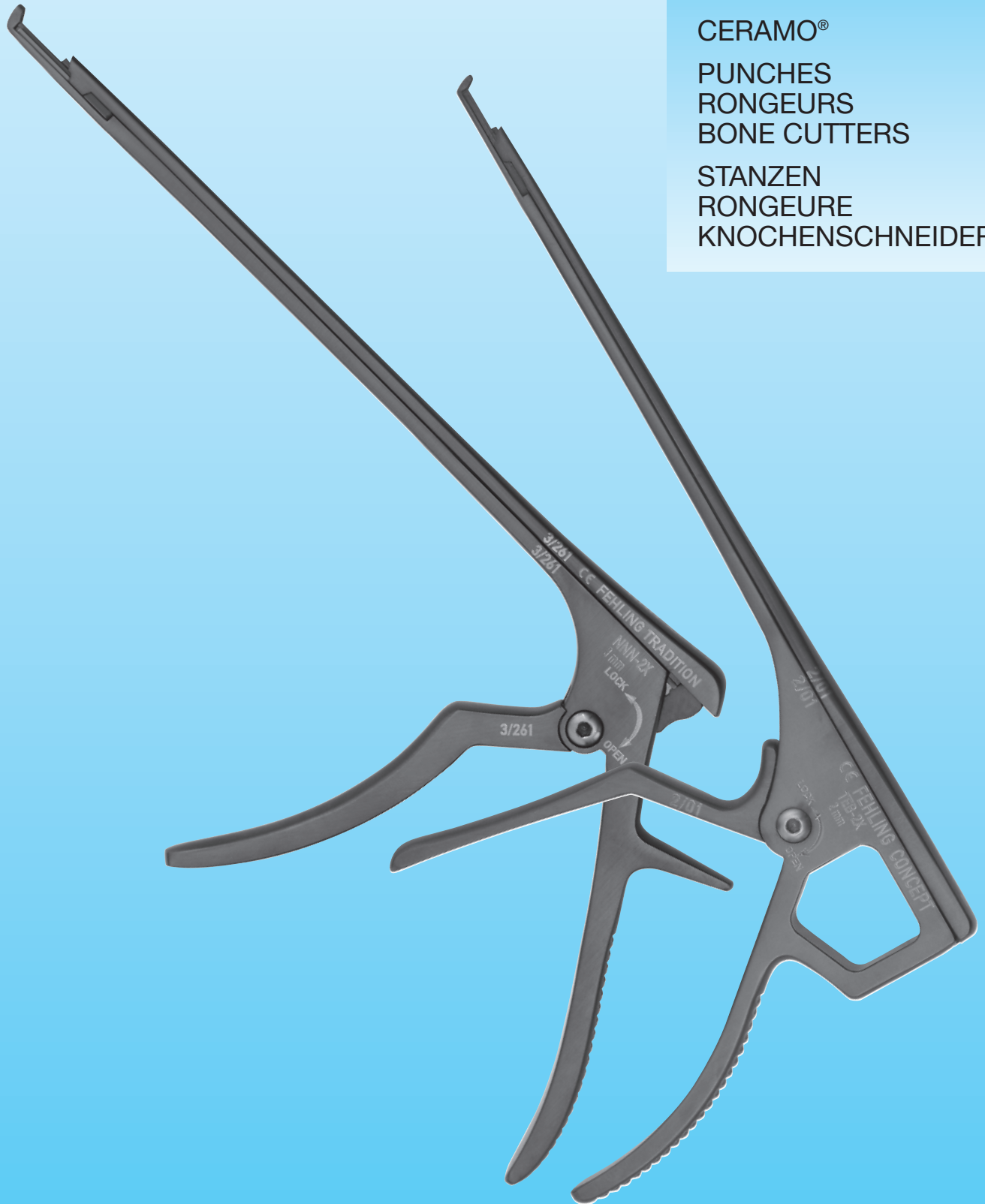
... THE DIFFERENCE

6

CERAMO®

PUNCHES
RONGEURS
BONE CUTTERS

STANZEN
RONGEURE
KNOCHENSCHNEIDER



FEHLING
INSTRUMENTS

Hanauer Landstr. 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49 (0) 61 88 - 9574.40



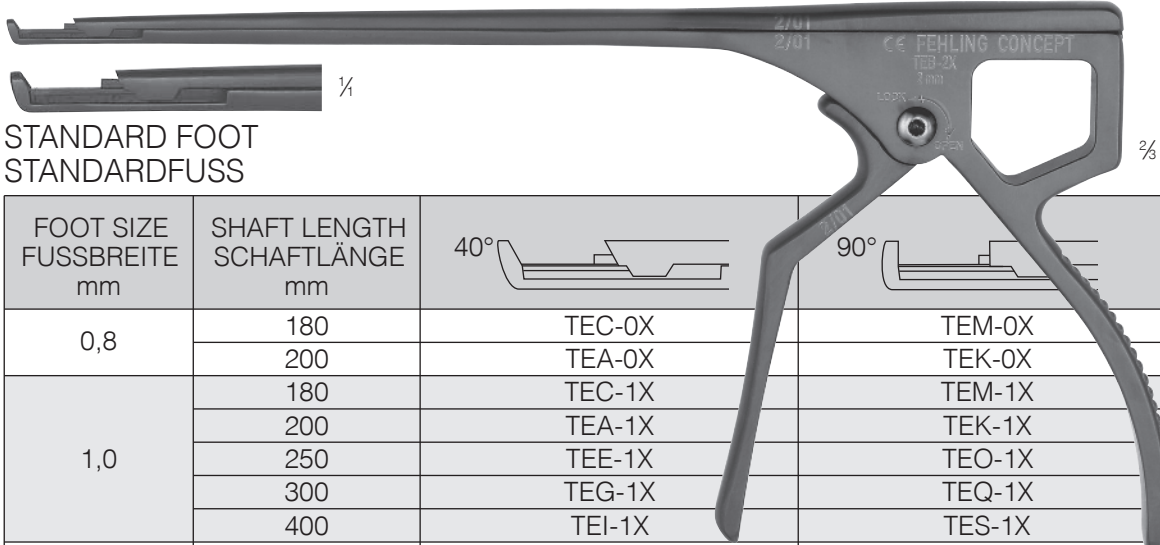
+49 (0) 61 88 - 9574.45



info@fehling-instruments.de

CERAMO® **CONCEPT X**

DETACHABLE / ZERLEGBAR



STANDARD FOOT
STANDARDFUSS

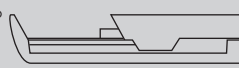

FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm	40°	90°
0,8	180	TEC-0X	TEM-0X
	200	TEA-0X	TEK-0X
1,0	180	TEC-1X	TEM-1X
	200	TEA-1X	TEK-1X
	250	TEE-1X	TEO-1X
	300	TEG-1X	TEQ-1X
	400	TEI-1X	TES-1X
1,5	180	TEC-7X	TEM-7X
	200	TEA-7X	TEK-7X
	250	TEE-7X	TEO-7X
	300	TEG-7X	TEQ-7X
	400	TEI-7X	TES-7X
2,0	180	TEC-2X	TEM-2X
	200	TEA-2X	TEK-2X
	250	TEE-2X	TEO-2X
	300	TEG-2X	TEQ-2X
	400	TEI-2X	TES-2X
2,5	180	TEC-8X	TEM-8X
	200	TEA-8X	TEK-8X
	250	TEE-8X	TEO-8X
	300	TEG-8X	TEQ-8X
	400	TEI-8X	TES-8X
3,0	180	TEC-3X	TEM-3X
	200	TEA-3X	TEK-3X
	250	TEE-3X	TEO-3X
	300	TEG-3X	TEQ-3X
	400	TEI-3X	TES-3X
3,5	180	TEC-9X	TEM-9X
	200	TEA-9X	TEK-9X
	250	TEE-9X	TEO-9X
	300	TEG-9X	TEQ-9X
	400	TEI-9X	TES-9X
4,0	180	TEC-4X	TEM-4X
	200	TEA-4X	TEK-4X
	250	TEE-4X	TEO-4X
	300	TEG-4X	TEQ-4X
	400	TEI-4X	TES-4X
5,0	180	TEC-5X	TEM-5X
	200	TEA-5X	TEK-5X
	250	TEE-5X	TEO-5X
	300	TEG-5X	TEQ-5X
	400	TEI-5X	TES-5X
6,0	180	TEC-6X	TEM-6X
	200	TEA-6X	TEK-6X
	250	TEE-6X	TEO-6X
	300	TEG-6X	TEQ-6X
	400	TEI-6X	TES-6X

CERAMO® **CONCEPT X**

DETACHABLE / ZERLEGBAR



FLAT FOOT
FLACHFUSS

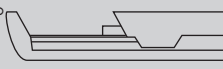


FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm	40°		90°	
					
1,0	180	TED-1X	TEN-1X		
	200	TEB-1X	TEL-1X		
	250	TEF-1X	TEP-1X		
	300	TEH-1X	TER-1X		
	400	TEJ-1X	TET-1X		
1,5	180	TED-7X	TEN-7X		
	200	TEB-7X	TEL-7X		
	250	TEF-7X	TEP-7X		
	300	TEH-7X	TER-7X		
	400	TEJ-7X	TET-7X		
2,0	180	TED-2X	TEN-2X		
	200	TEB-2X	TEL-2X		
	250	TEF-2X	TEP-2X		
	300	TEH-2X	TER-2X		
	400	TEJ-2X	TET-2X		
2,5	180	TED-8X	TEN-8X		
	200	TEB-8X	TEL-8X		
	250	TEF-8X	TEP-8X		
	300	TEH-8X	TER-8X		
	400	TEJ-8X	TET-8X		
3,0	180	TED-3X	TEN-3X		
	200	TEB-3X	TEL-3X		
	250	TEF-3X	TEP-3X		
	300	TEH-3X	TER-3X		
	400	TEJ-3X	TET-3X		
3,5	180	TED-9X	TEN-9X		
	200	TEB-0X	TEL-9X		
	250	TEF-9X	TEP-9X		
	300	TEH-9X	TER-9X		
	400	TEJ-9X	TET-9X		
4,0	180	TED-4X	TEN-4X		
	200	TEB-4X	TEL-4X		
	250	TEF-4X	TEP-4X		
	300	TEH-4X	TER-4X		
	400	TEJ-4X	TET-4X		
5,0	180	TED-5X	TEN-5X		
	200	TEB-5X	TEL-5X		
	250	TEF-5X	TEP-5X		
	300	TEH-5X	TER-5X		
	400	TEJ-5X	TET-5X		
6,0	180	TED-6X	TEN-6X		
	200	TEB-6X	TEL-6X		
	250	TEF-6X	TEP-6X		
	300	TEH-6X	TER-6X		
	400	TEJ-6X	TET-6X		

CERAMO® **TRADITION X**

DETACHABLE / ZERLEGBAR



STANDARD FOOT
STANDARDFUSS

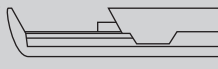


FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm	40° 	40° 	90° 
0,8	200	NNB-9X	-	-
1,0	180	NYC-2X	TRD-1X	-
	200	NNN-0X	-	-
	250	NZY-6X	-	-
	300	NYA-0X	-	-
1,5	180	NYC-1X	-	-
	200	NTI-0X	-	-
2,0	180	NNG-1X	TRD-2X	-
	200	NNY-0X	NNZ-8X	NVB-7X
	250	NNG-7X	-	-
	300	NNG-8X	-	-
	400	NNG-9X	-	-
2,5	200	NNN-1X	-	NNK-2X
	250	NNL-2X	-	-
	300	NNE-2X	NNF-6X	NNE-6X
	400	NNY-2X	NNX-5X	NNV-5X
3,0	180	NNL-7X	TRB-8X	-
	200	NNN-2X	NNN-7X	NNK-3X
	250	NNL-3X	NTI-1X	-
	300	NNE-3X	NNF-7X	NNE-7X
3,5	400	NNY-3X	NNX-6X	NNV-6X
	200	NNN-3X	TNC-3X	TNC-5X
4,0	180	NNL-8X	TRB-9X	-
	200	NNN-4X	NNN-8X	NNK-4X
	250	NNL-4X	-	-
	300	NNE-4X	NNF-8X	NNE-8X
5,0	400	NNY-4X	NNX-7X	NNV-7X
	180	NNL-9X	TRC-0X	-
	200	NNN-5X	NNN-9X	NNK-5X
	250	NNL-5X	-	-
	300	NNE-5X	NNF-9X	NNE-9X
6,0	400	NNY-5X	NNX-8X	NNV-8X
	180	NVC-0X	-	-
	200	NNN-6X	-	-
	250	NNQ-9X	-	-
	300	NNE-0X	NNG-0X	NNH-0X
400	NNY-6X	NNX-9X	NNV-9X	

CERAMO® **TRADITION X**

DETACHABLE / ZERLEGBAR



FLAT FOOT
FLACHFUSS

FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm	40° 	40° 	90° 
1,0	180	NVU-0X	TRB-6X	TRB-5X
	200	NZY-8X	TRB-0X	-
	250	NZY-9X	-	-
	300	NYB-0X	-	-
	400	-	-	NTI-2X
2,0	180	NVF-7X	TRB-7X	-
	200	NNR-0X	NTH-7X	-
	250	NNL-1X	-	-
	300	NNX-0X	NVE-8X	-
	400	NVF-9X	-	-
2,5	180	NVF-2X	-	-
	200	NNO-1X	NNO-4X	NNJ-9X
	250	NNK-8X	-	-
	300	NNW-2X	NNT-6X	-
	400	NNQ-0X	-	NND-6X
3,0	180	NVF-3X	-	-
	200	NNO-2X	NNO-5X	NNK-0X
	250	NNL-6X	-	-
	300	NNW-3X	NNT-7X	-
	400	NNQ-1X	NNQ-6X	NND-7X
3,5	180	NYC-5X	-	-
	200	NNO-8X	-	-
4,0	180	NVF-4X	-	-
	200	NNO-3X	NNO-6X	NNK-1X
	250	NNK-9X	-	-
	300	NNW-4X	NNT-8X	-
	400	NNQ-2X	-	NND-8X
5,0	180	NVF-8X	-	-
	200	NNO-7X	NNO-9X	-
	250	NNL-0X	-	-
	300	NNW-5X	NNT-9X	-
	400	NNQ-3X	-	NND-9X
6,0	200	NNO-0X	-	-

CERAMO® **TURNUS***
ROTATABLE SHAFT
DREHBARER SCHAFT

HANDLES / GRIFFE



CONCEPT

TGZ-0



TRADITION

TGZ-6A

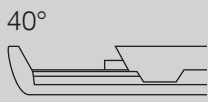
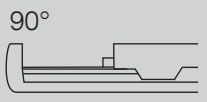
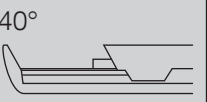
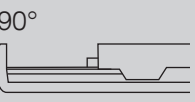
*WARNING: Please use CONCEPT TURNUS punches for cervical and transspenoidal surgery only.

*ACHTUNG: CONCEPT TURNUS Stanzen sind ausschließlich für die Chirurgie der Halswirbelsäule und der Hypophyse ausgelegt.

CERAMO® **TURNUS***

ROTATABLE SHAFTS / DREHBARE SCHÄFTE



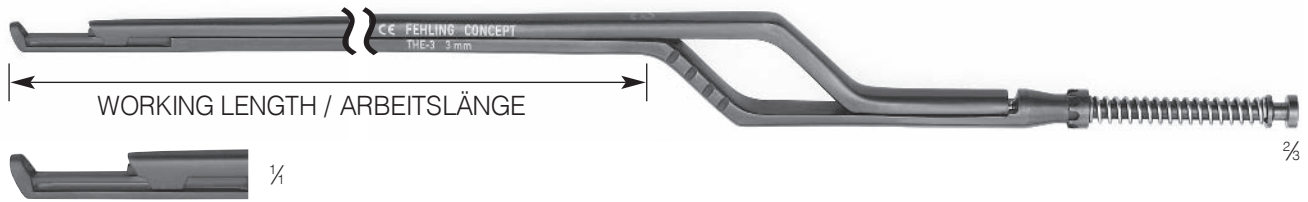
FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm	STANDARD FOOT STANDARDFUSS		FLAT FOOT FLACHFUSS	
		40° 	90° 	40° 	90° 
0,8	180	TGC-0	TGM-0	-	-
	200	TGA-0	TGK-0	-	-
1,0	180	TGC-1	TGM-1	TGD-1	TGN-1
	200	TGA-1	TGK-1	TGB-1	TGL-1
	250	TGE-1	TGO-1	TGF-1	TGP-1
	300	TGG-1	TGQ-1	TGH-1	TGR-1
	400	TGI-1	TGS-1	TGJ-1	TGT-1
1,5	180	TGC-7	TGM-7	TGD-7	TGN-7
	200	TGA-7	TGK-7	TGB-7	TGL-7
	250	TGE-7	TGO-7	TGF-7	TGP-7
	300	TGG-7	TGQ-7	TGH-7	TGR-7
	400	TGI-7	TGS-7	TGJ-7	TGT-7
2,0	180	TGC-2	TGM-2	TGD-2	TGN-2
	200	TGA-2	TGK-2	TGB-2	TGL-2
	250	TGE-2	TGO-2	TGF-2	TGP-2
	300	TGG-2	TGQ-2	TGH-2	TGR-2
	400	TGI-2	TGS-2	TGJ-2	TGT-2
2,5	180	TGC-8	TGM-8	TGD-8	TGN-8
	200	TGA-8	TGK-8	TGB-8	TGL-8
	250	TGE-8	TGO-8	TGF-8	TGP-8
	300	TGG-8	TGQ-8	TGH-8	TGR-8
	400	TGI-8	TGS-8	TGJ-8	TGT-8
3,0	180	TGC-3	TGM-3	TGD-3	TGN-3
	200	TGA-3	TGK-3	TGB-3	TGL-3
	250	TGE-3	TGO-3	TGF-3	TGP-3
	300	TGG-3	TGQ-3	TGH-3	TGR-3
	400	TGI-3	TGS-3	TGJ-3	TGT-3
3,5	180	TGC-9	TGM-9	-	-
	200	TGA-9	TGK-9	-	-
	250	TGE-9	TGO-9	-	-
	300	TGG-9	TGQ-9	-	-
	400	TGI-9	TGS-9	-	-
4,0	180	TGC-4	TGM-4	TGD-4	TGN-4
	200	TGA-4	TGK-4	TGB-4	TGL-4
	250	TGE-4	TGO-4	TGF-4	TGP-4
	300	TGG-4	TGQ-4	TGH-4	TGR-4
	400	TGI-4	TGS-4	TGJ-4	TGT-4
5,0	180	TGC-5	TGM-5	TGD-5	TGN-5
	200	TGA-5	TGK-5	TGB-5	TGL-5
	250	TGE-5	TGO-5	TGF-5	TGP-5
	300	TGG-5	TGQ-5	TGH-5	TGR-5
	400	TGI-5	TGS-5	TGJ-5	TGT-5
6,0	180	TGC-6	TGM-6	TGD-6	TGN-6
	200	TGA-6	TGK-6	TGB-6	TGL-6
	250	TGE-6	TGO-6	TGF-6	TGP-6
	300	TGG-6	TGQ-6	TGH-6	TGR-6
	400	TGI-6	TGS-6	TGJ-6	TGT-6

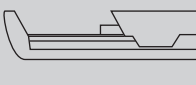
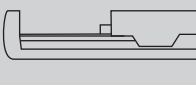
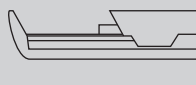
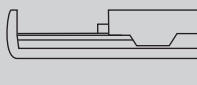
All punches with length 300 and 400 mm are calibrated / Alle Stanzen in den Längen 300 und 400 mm sind graduiert

*See page 6/6 / siehe Seite 6/6

CERAMO® **TURNUS***


ROTATABLE SHAFTS / DREHBARE SCHÄFTE



FOOT SIZE FUSSBREITE mm	WORKING LENGTH ARBEITSLÄNGE mm	STANDARD FOOT STANDARDFUSS		FLAT FOOT FLACHFUSS	
		40° 	90° 	40° 	90° 
1,0	110	THA-1	THK-1	THB-1	THL-1
	150	THC-1	THM-1	THD-1	THN-1
	180	THE-1	THO-1	THF-1	THP-1
1,5	110	THA-7	THK-7	THB-7	THL-7
	150	THC-7	THM-7	THD-7	THN-7
	180	THE-7	THO-7	THF-7	THP-7
2,0	110	THA-2	THK-2	THB-2	THL-2
	150	THC-2	THM-2	THD-2	THN-2
	180	THE-2	THO-2	THF-2	THP-2
2,5	110	THA-8	THK-8	THB-8	THL-8
	150	THC-8	THM-8	THD-8	THN-8
	180	THE-8	THO-8	THF-8	THP-8
3,0	110	THA-3	THK-3	THB-3	THL-3
	150	THC-3	THM-3	THD-3	THN-3
	180	THE-3	THO-3	THF-3	THP-3
4,0	110	THA-4	THK-4	THB-4	THL-4
	150	THC-4	THM-4	THD-4	THN-4
	180	THE-4	THO-4	THF-4	THP-4
5,0	110	THA-5	THK-5	THB-5	THL-5
	150	THC-5	THM-5	THD-5	THN-5
	180	THE-5	THO-5	THF-5	THP-5
6,0	110	THA-6	THK-6	THB-6	THL-6
	150	THC-6	THM-6	THD-6	THN-6
	180	THE-6	THO-6	THF-6	THP-6

*see page 6/6 / siehe Seite 6/6



SHAFT Ø SCHAFT Ø mm	SHAFT LENGTH SCHAFTLÄNGE mm	40° 
3,0	360	TGW-1
3,5	360	TGW-0

FOR ENDOSCOPY (NO EJECTOR)
FÜR ENDOSKOPIE (KEIN AUSWERFER)

*see page 6/6 / siehe Seite 6/6

CERAMO® **GENTLE**

DETACHABLE / ZERLEGBAR

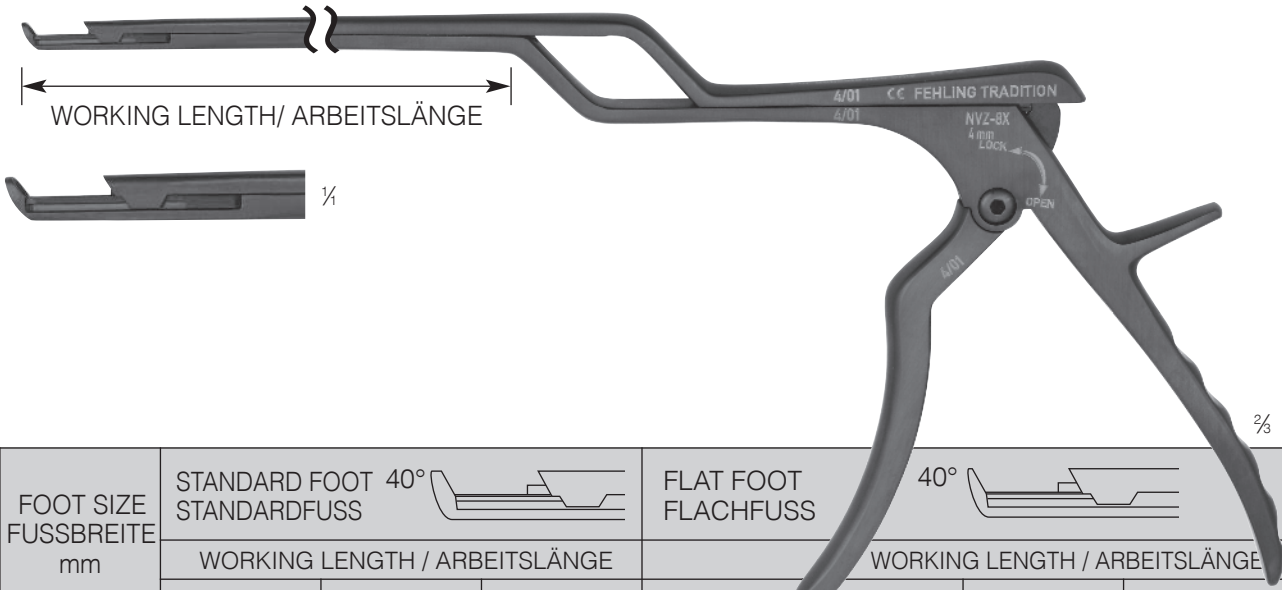
BIG HANDLE AND STROKE
GROSSER GRIFF UND HUB

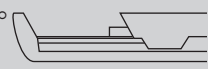



FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm	STANDARD FOOT STANDARDFUSS		FLAT FOOT FLACHFUSS
		40° GENTLE	40° GENTLE-“SINGER”	40° GENTLE
1,0	200	TIA-1	-	TIB-1
	250	TIC-1	-	TID-1
2,0	200	TIA-2	-	TIB-2
	250	TIC-2	-	TID-2
	300	TIE-2	-	TIF-2
3,0	200	TIA-3	TIG-3	TIB-3
	250	TIC-3	TIH-3	TID-3
	300	TIE-3	TIJ-3	TIF-3
4,0	200	TIA-4	TIG-4	TIB-4
	250	TIC-4	TIH-4	TID-4
	300	TIE-4	TIJ-4	TIF-4
5,0	200	TIA-5	TIG-5	TIB-5
	250	TIC-5	TIH-5	TID-5
	300	TIE-5	TIJ-5	TIF-5
6,0	200	TIA-6	TIG-6	TIB-6
	250	TIC-6	TIH-6	TID-6
	300	TIE-6	TIJ-6	TIF-6
7,0	200	TIA-8	-	-
8,0	200	TIA-7	-	-

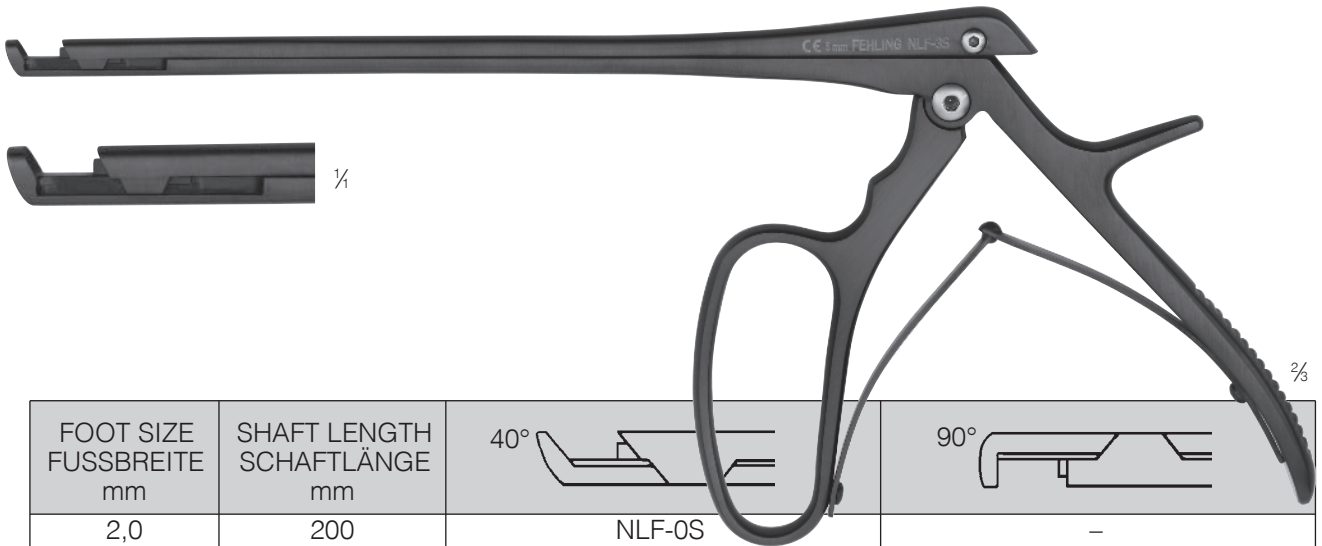
CERAMO® **TRADITION X**



DETACHABLE / ZERLEGBAR



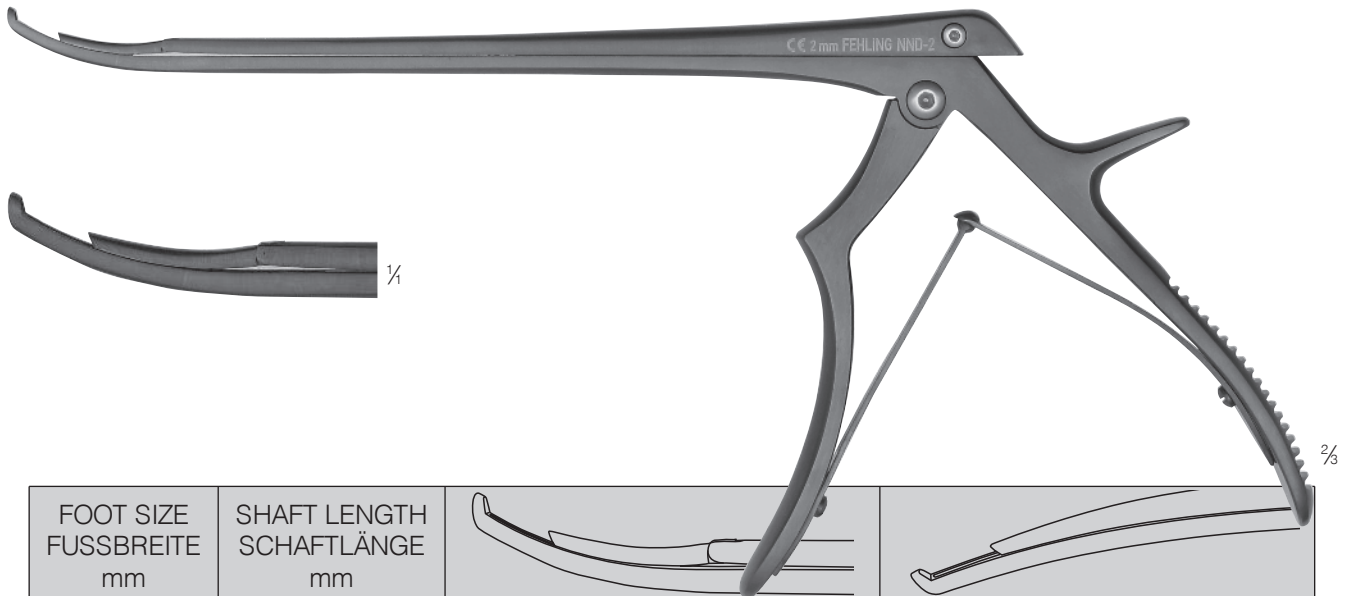
FOOT SIZE FUSSBREITE mm	STANDARD FOOT 40° STANDARDFUSS 			FLAT FOOT 40° FLACHFUSS 			
	WORKING LENGTH / ARBEITSLÄNGE			WORKING LENGTH / ARBEITSLÄNGE			
	110 mm	140 mm	180 mm	140 mm	160 mm	180 mm	200 mm
1,0	NUZ-9X	NVZ-1X	NVZ-0X	NVZ-6X	–	NVZ-3X	NVD-0X
2,0	NNU-0X	NVZ-2X	NVA-5X	NVZ-7X	NUZ-5X	NVZ-4X	NVD-1X
3,0	NNU-1X	NNU-4X	NNU-7X	NNX-4X	NUZ-6X	NVA-8X	NVD-6X
4,0	NNU-2X	NNU-5X	NNU-8X	NVZ-8X	NUZ-7X	NVZ-5X	–
5,0	NNU-3X	NNU-6X	NNU-9X	NVZ-9X	–	NVA-9X	–

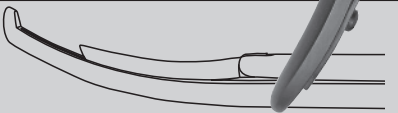

CERAMO® **FIST**



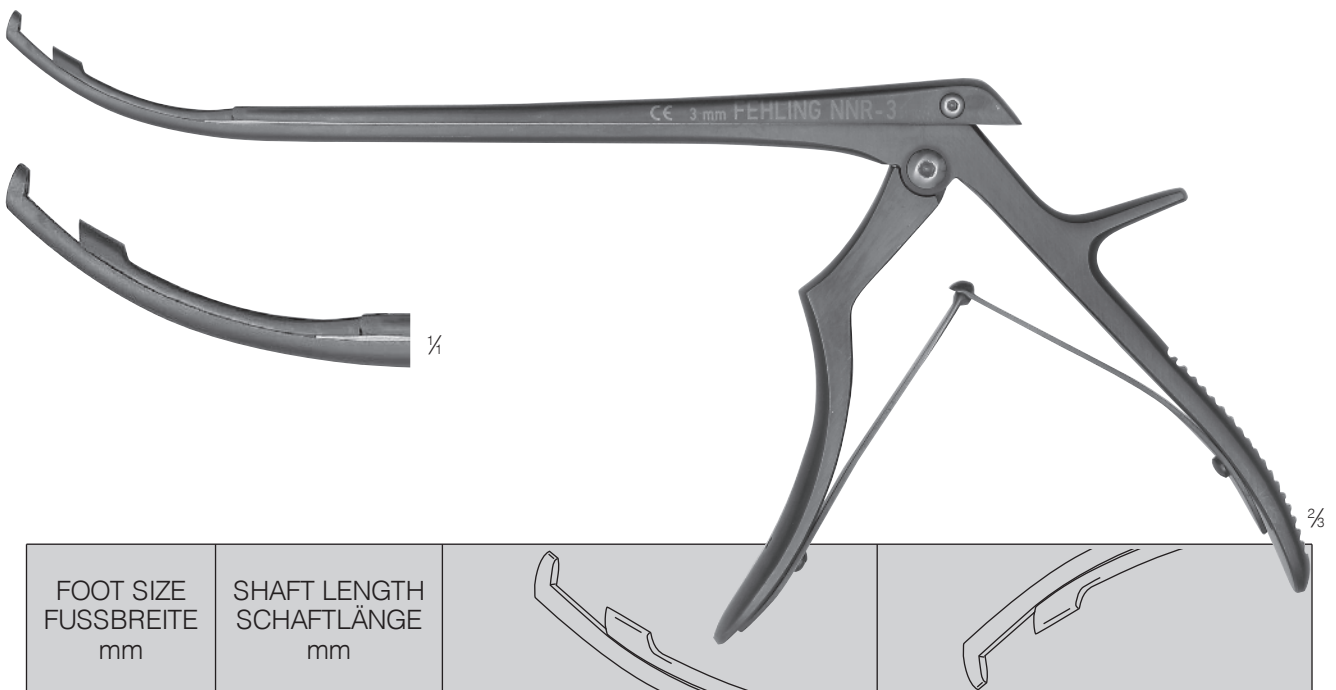
FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm	40° 	90° 
		2,0	200
3,0	200	NLF-1S	NLG-5S
	300	NLF-5S	NLH-1S
	400	NLG-1S	NLH-5S
4,0	200	NLF-2S	NLG-6S
	300	NLF-6S	NLH-2S
	400	NLG-2S	NLH-6S
5,0	200	NLF-3S	NLG-7S
	300	NLF-7S	NLH-3S
	400	NLG-3S	NLH-7S
6,0	200	NLF-4S	NLG-8S
	300	NLF-8S	NLH-4S
	400	NLG-4S	NLH-8S
7,0	300	NLF-9S	–

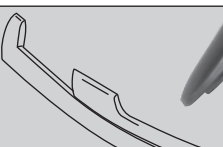
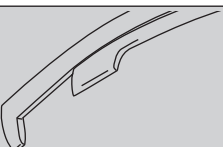
CERAMO® **SUBLAMINAR**



FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm		
2,0	200	NND-2	NVD-2
	250	NVC-2	NVE-2
3,0	200	NND-3	NVD-3
	250	NVC-3	NVE-3
4,0	200	NND-4	NVD-4
	250	NVC-4	NVE-4
5,0	200	NND-5	NVD-5
	250	NVC-5	NVE-5

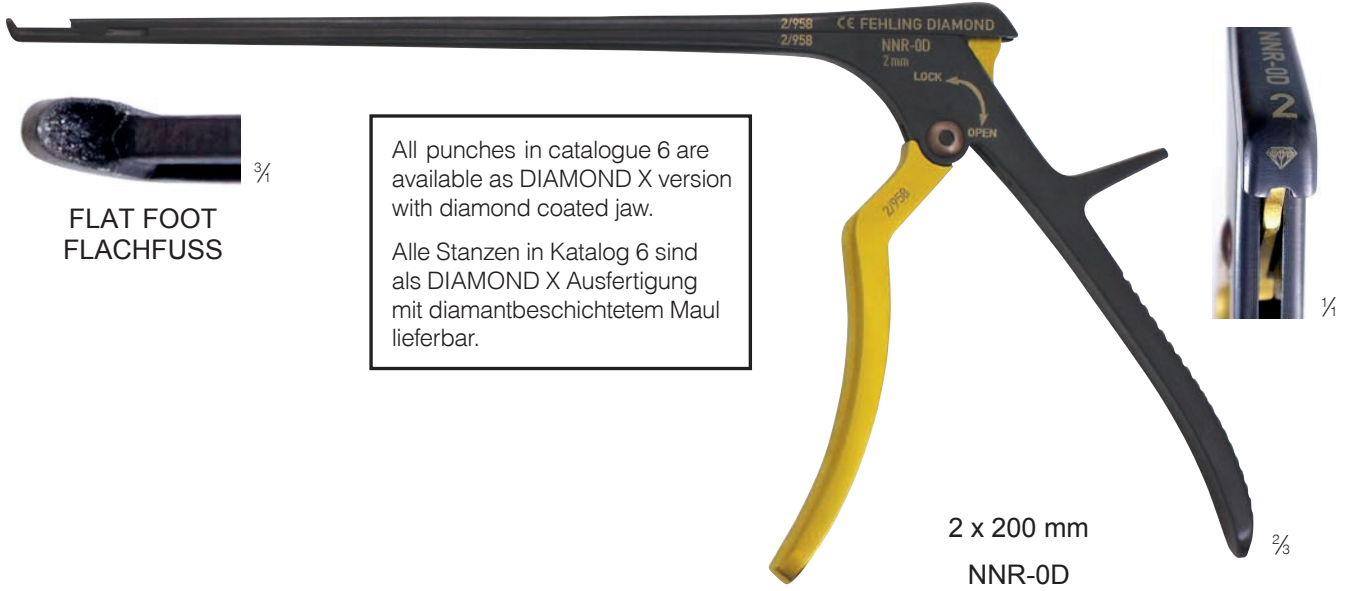
CERAMO® **KERRISON**



FOOT SIZE FUSSBREITE mm	SHAFT LENGTH SCHAFTLÄNGE mm		
2,0	200	NNR-9	-
3,0	200	NNR-3	NNR-6
4,0	200	NNR-4	NNR-7
	250	NNR-1	NNR-2
5,0	200	NNR-5	NNR-8

CERAMO® **TRADITION DIAMOND X**

FOR LIGAMENTS
FÜR LIGAMENTE



ACCESSORIES FOR PUNCHES
ZUBEHÖR FÜR STANZEN



STERILIZATION AND STORAGE TRAY FOR 10 PUNCHES
STERILISIERUNGS- UND AUFBEWAHRUNGSCONTAINER FÜR 10 STANZEN

515 x 250 x 150 mm

UCA-3

ACCESSORIES FOR DETACHABLE PUNCHES
ZUBEHÖR FÜR ZERLEGBARE STANZEN

FITTING DEVICES
MONTAGEVORRICHTUNGEN



CONCEPT X
TXW-7X



TRADITION X
TXW-6X



GENTLE
TXW-8X



SCREWDRIVER
SCHRAUBENDREHER
TXX-0X



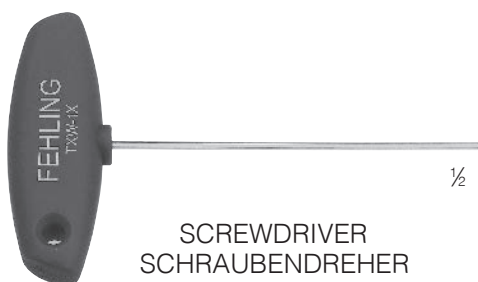
SCREWDRIVER
STERILISABLE
SCHRAUBENDREHER
STERILISIERBAR
TXW-9X

CERAMO®



JAW WIDTH MAULBREITE mm	LENGTH LÄNGE mm			30°		30°	
		GRUMME	GRUMME X	GRUMME	GRUMME X	GRUMME	GRUMME X
2,0	120	NLO-2	NLO-2X	NLO-6	NLO-6X	NLN-6	NLN-6X
	160	NLT-2	NLT-2X	NLT-6	NLT-6X	NLV-2	NLV-2X
	180	NLU-2	NLU-2X	NLU-6	NLU-6X	NLV-6	NLV-6X
	200	NLX-2	NLX-2X	NLX-6	NLX-6X	-	-
	250	NLW-2	NLW-2X	-	NMJ-8X	-	-
	300	-	-	NLW-7	-	-	-
3,0	120	NLO-3	NLO-3X	NLO-7	NLO-7X	NLN-7	NLN-7X
	160	NLT-3	NLT-3X	NLT-7	NLT-7X	NLV-3	NLV-3X
	180	NLU-3	NLU-3X	NLU-7	NLU-7X	NLV-7	NLV-7X
	200	NLX-3	NLX-3X	NLX-7	-	-	-
	250	NLW-3	NLW-3X	-	NMJ-9X	-	-
4,0	120	NLO-4	NLO-4X	NLO-8	NLO-8X	NLN-8	NLN-8X
	160	NLT-4	NLT-4X	NLT-8	NLT-8X	NLV-4	NLV-4X
	180	NLU-4	NLU-4X	NLU-8	NLU-8X	NLV-8	NLV-8X
	200	NLX-4	NLX-4X	NLX-8	NLX-8X	-	-
	250	NLW-4	NLW-4X	-	NMK-0X	-	-
5,0	120	NLO-5	NLO-5X	NLO-9	NLO-9X	NLN-9	NLN-9X
	160	NLT-5	NLT-5X	NLZ-9	NLZ-9X	NLV-5	NLV-5X
	180	NLU-5	NLU-5X	NLU-9	NLU-9X	NLV-9	NLV-9X
	200	NLX-5	NLX-5X	NLX-9	NLX-9X	-	-
	250	NLW-5	NLW-5X	NLW-0	NLW-0X	-	-
6,0	120	NLO-0	-	-	-	-	-
	250	NLW-6	NLW-6X	-	-	-	-

ACCESSORIES FOR GRUMME X RONGEURS
ZUBEHÖR FÜR GRUMME X RONGEURE



SCREWDRIVER
SCHRAUBENDREHER

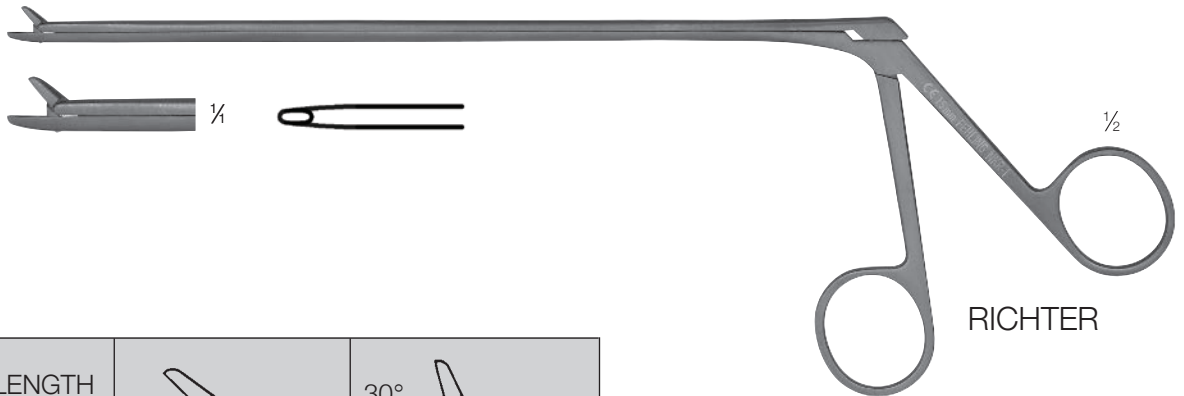
TXW-1X



SCREWDRIVER STERILISABLE
SCHRAUBENDREHER STERILISIERBAR

TXW-2X

CERAMO®



JAW WIDTH MAULBREITE mm	LENGTH LÄNGE mm	30°		30°	
		RICHTER	RICHTER X	RICHTER	RICHTER X
1,0	180	NKR-2	NKR-2X	NKR-4	NKR-4X
1,5	180	NKR-1	NKR-1X	NKR-3	NKR-3X



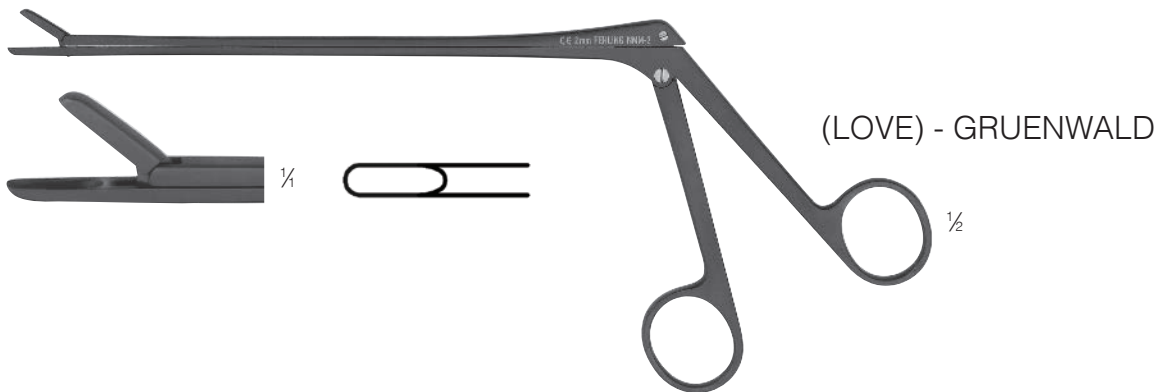
JAW WIDTH MAULBREITE mm	LENGTH LÄNGE mm	
10	200	TOV-1
12	200	TOV-2

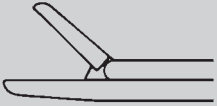
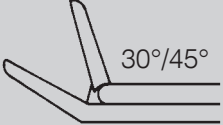
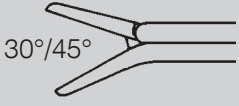
CERAMO®



JAW WIDTH MAULBREITE mm	LENGTH LÄNGE mm				
		FERRIS-SMITH	FERRIS-SMITHX	FERRIS-SMITH	FERRIS-SMITHX
2,0	180	TOC-0	TOC-0X	TOF-0	TOF-0X
	200	TOG-0	TOG-0X	TOH-0	TOH-0X
	250	TOI-0	TOI-0X	TOJ-0	TOJ-0X
	300	TOK-0	TOK-0X	TON-0	TON-0X
2,5	200	TOG-7	TOG-7X	–	–
3,0	180	TOC-1	TOC-1X	TOF-1	TOF-1X
	200	TOG-1	TOG-1X	TOH-1	TOH-1X
	250	TOI-1	TOI-1X	TOJ-1	TOJ-1X
	300	TOK-1	TOK-1X	TON-1	TON-1X
	400	TOO-3	TOO-3X	TOO-8	TOO-8X
3,5	200	TOG-8	TOG-8X	–	–
4,0	180	TOC-2	TOC-2X	TOF-2	TOF-2X
	200	TOG-2	TOG-2X	TOH-2	TOH-2X
	250	TOI-2	TOI-2X	TOJ-2	TOJ-2X
	300	TOK-2	TOK-2X	TON-2	TON-2X
	400	TOO-4	TOO-4X	TOO-9	TOO-9X
5,0	180	TOC-3	TOC-3X	TOF-3	TOF-3X
	200	TOG-3	TOG-3X	TOH-3	TOH-3X
	250	TOI-3	TOI-3X	TOJ-3	TOJ-3X
	300	TOK-3	TOK-3X	TON-3	TON-3X
	400	TOO-5	TOO-5X	–	–
6,0	180	TOC-4	TOC-4X	TOF-4	TOF-4X
	200	TOG-4	TOG-4X	TOH-4	TOH-4X
	250	TOI-4	TOI-4X	TOJ-4	TOJ-4X
	300	TOK-4	TOK-4X	TON-4	TON-4X
7,0	180	TOC-5	TOC-5X	TOF-5	TOF-5X
	200	TOG-5	TOG-5X	TOH-5	TOH-5X
	250	TOI-5	TOI-5X	TOJ-5	TOJ-5X
	300	TOK-5	TOK-5X	TON-5	TON-5X
8,0	180	TOC-6	TOC-6X	TOF-6	TOF-6X
	200	TOG-6	TOG-6X	TOH-6	TOH-6X
	250	TOI-6	TOI-6X	TOJ-6	TOJ-6X
	300	TOK-6	TOK-6X	TON-6	TON-6X

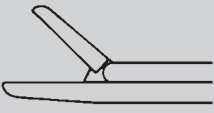
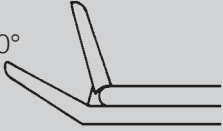
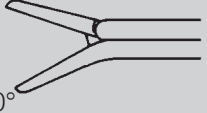
CERAMO®



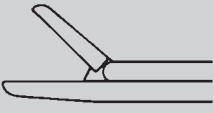
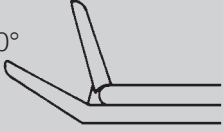
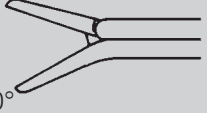
JAW WIDTH MAULBREITE mm	LENGTH LÄNGE mm			
1,0	180	NMM-1	NMN-1	NMO-1
	200	NLP-1	NMN-0	-
2,0	160	NMJ-2	NMK-2	NML-2
	180	NMM-2	NMN-2	NMO-2
	250	NMP-2	NMQ-2	NMR-2
	300	NMW-9	NMW-7 (45°)	NMW-8 (45°)
	400	NMK-6	NMT-6 (45°)	NMT-8 (45°)
3,0	160	NMJ-3	NMK-3	NML-3
	180	NMM-3	NMN-3	NMO-3
	250	NMP-3	NMQ-3	NMR-3
	300	NMW-3	NMW-1 (45°)	NMW-2 (45°)
	400	NMK-7	NMT-7 (45°)	NMT-9 (45°)
4,0	160	NMJ-4	NMK-4	NML-4
	180	NMM-4	NMN-4	NMO-4
	250	NMP-4	NMQ-4	NMR-4
	300	NMU-5	NMU-1 (45°)	NMU-2 (45°)
	400	NMK-8	NMU-3 (45°)	NMU-4 (45°)
5,0	160	NMJ-5	NMK-5	NML-5
	180	NMM-5	NMN-5	NMO-5
	250	NMP-5	NMQ-5	NMR-5
	300	NMW-6	NMW-4 (45°)	NMW-5 (45°)
	400	NMK-9	NMU-8 (45°)	NMU-9 (45°)

CERAMO®

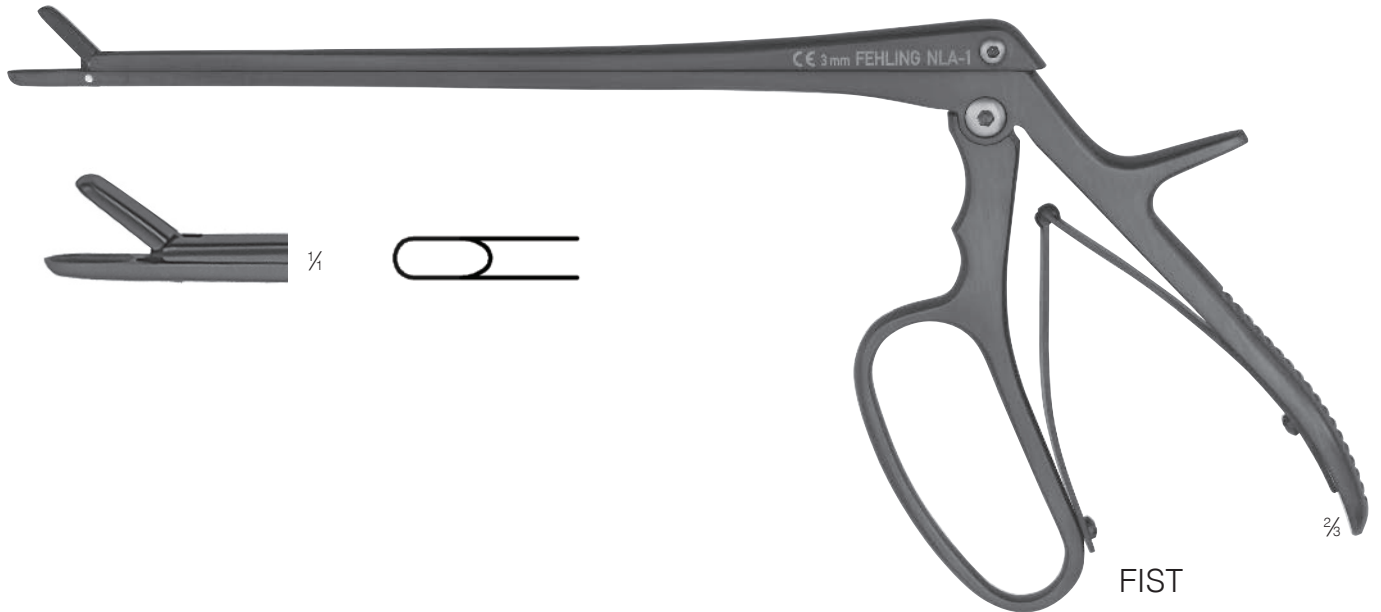


JAW WIDTH MAULBREITE mm	LENGTH LÄNGE mm		30° 	30° 
2,5	130	NMA-2	NMB-2	NMC-2
	160	NMD-2	NME-2	NMF-2
3,0	130	NMA-3	NMB-3	NMC-3
	160	NMD-3	NME-3	NMF-3
4,0	130	NMA-4	NMB-4	NMC-4
	160	NMD-4	NME-4	NMF-4
5,0	130	NMA-5	NMB-5	NMC-5
	160	NMD-5	NME-5	NMF-5
6,0	130	NMA-6	NMB-6	NMC-6
	160	NMD-6	NME-6	NMF-6



JAW WIDTH MAULBREITE mm	LENGTH LÄNGE mm		30° 	30° 
2,0	160	NMG-1	NMH-1	NMI-1
	180	NMG-0	NMH-0	NMI-0
2,5	160	NMG-2	NMH-2	NMI-2
	180	NMG-6	NMH-6	NMI-6
3,0	160	NMG-3	NMH-3	NMI-3
	180	NMG-7	NMH-7	NMI-7
4,0	160	NMG-4	NMH-4	NMI-4
	180	NMG-8	NMH-8	NMI-8
5,0	160	NMG-5	NMH-5	NMI-5
	180	NMG-9	NMH-9	NMI-9

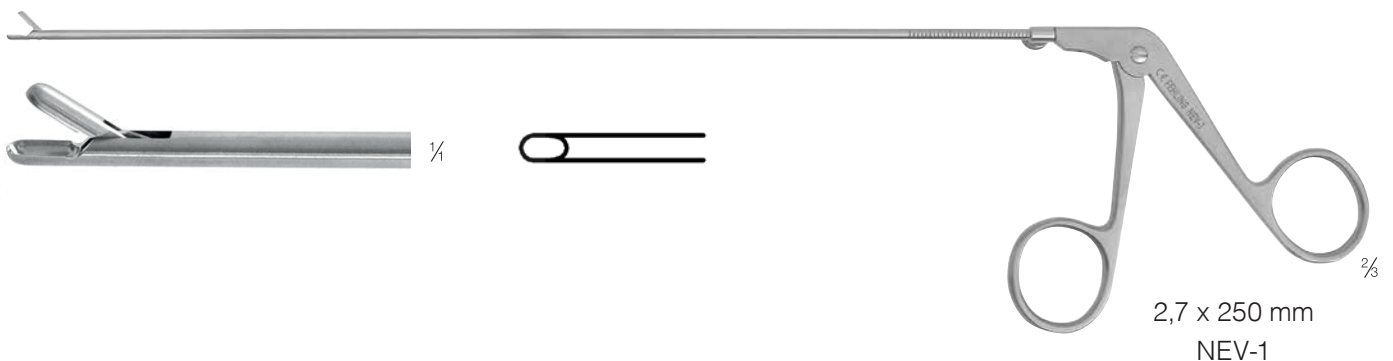
CERAMO®



JAW WIDTH MAULBREITE mm	LENGTH LÄNGE mm		30° 	30°
3,0	200	NLA-1	NLB-5	NLD-1
	300	NLA-5	NLC-1	NLD-5
	400	NLB-1	NLC-5	NLE-1
4,0	200	NLA-2	NLB-6	NLD-2
	300	NLA-6	NLC-2	NLD-6
	400	NLB-2	NLC-6	NLE-2
5,0	200	NLA-3	NLB-7	NLD-3
	300	NLA-7	NLC-3	NLD-7
	400	NLB-3	NLC-7	NLE-3
6,0	200	NLA-4	NLB-8	NLD-4
	300	NLA-8	NLC-4	NLD-8
	400	NLB-4	NLC-8	NLE-4

All rongeurs with length 300 and 400 mm are calibrated / Alle Rongeure in den Längen 300 und 400 mm sind graduiert

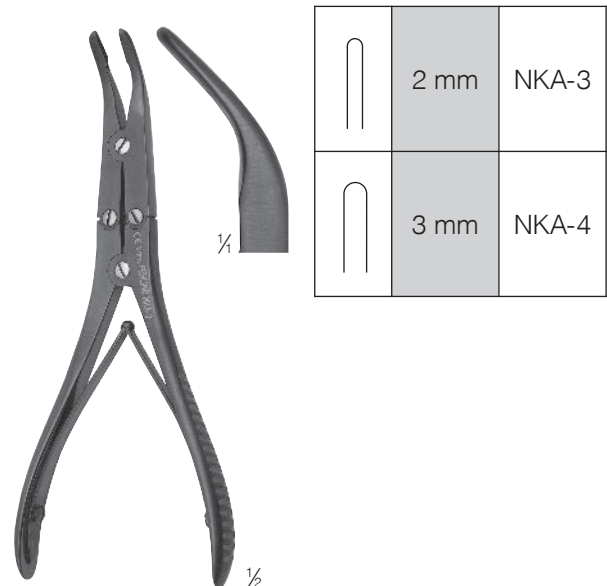
ENDOSCOPIC GRASPING FORCEPS
ENDOSKOPISCHE FASSZANGE



CERAMO®



BÖHLER
150 mm



BÖHLER
150 mm



BEYER
180 mm
NKA-5



ZAUFAL-JANSEN
180 mm
NKA-6

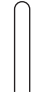



RUSKIN
190 mm
NKA-7

CERAMO®



MARQUARDT
200 mm



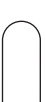
	2 mm	NKA-8
	3 mm	NKA-9



RUSKIN
230 mm
NKB-7







SMITH-PETERSON
240 mm

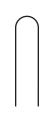


	3 mm	NKB-1
	4 mm	NKB-2
	5 mm	NKB-3

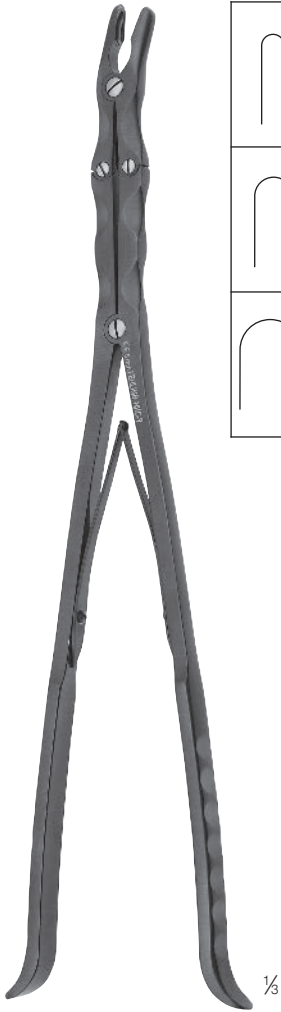


SMITH-PETERSON
240 mm

	2 mm	NKB-0
	3 mm	NKB-4
	4 mm	NKB-5
	5 mm	NKB-6

CERAMO®

	3 mm	NKC-7
	5 mm	NKC-8
	8 mm	NKC-9



MEGA-LUER
400 mm



STILLE-RUSKIN
230 mm
NKB-8



LUER-STILLE
270 mm
NKC-4



LUER-STILLE
220 mm



10 mm
NKC-1



10 mm
NKC-2

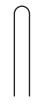






SEMB
230 mm
NKC-3

CERAMO®







LEKSELL
230 mm

	2 mm	NKD-0
	3 mm	NKD-6
	4 mm	NKD-7
	6 mm	NKD-8
	8 mm	NKD-9


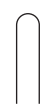





LEKSELL
230 mm

	3 mm	NKF-6
	4 mm	NKF-7
	6 mm	NKF-8
	8 mm	NKF-9



STILLE
230 mm

	2 mm	NKD-1
	3 mm	NKD-2
	4 mm	NKD-3
	6 mm	NKD-4
	8 mm	NKD-5

CERAMO®



BÖHLER
150 mm



NKK-1



NKK-2



RUSKIN-LISTON
190 mm



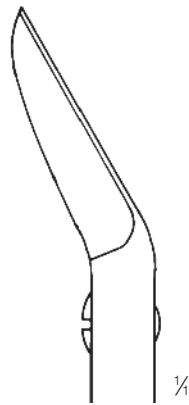
NKK-3



NKK-4

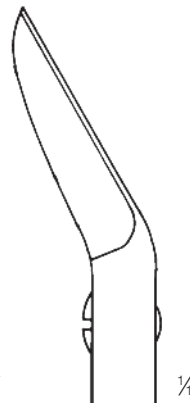


LISTON



235 mm

NKK-5

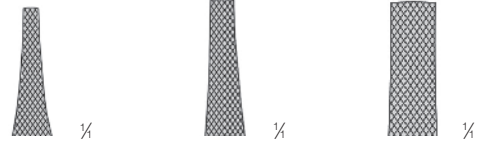


275 mm

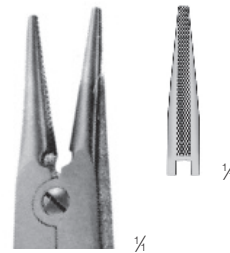
NKK-6



WIRE EXTRACTION PLIER
DRAHTAUSZUGSZANGE



LENGTH LÄNGE	EXTRA DELICATE EXTRA FEIN	DELICATE FEIN	LARGE BREIT
150 mm	LAE-6	-	LAE-8
180 mm	LAE-4	LAE-7	LAE-9



ROUND PLIERS
RUNDZANGE
180 mm
LAH-7

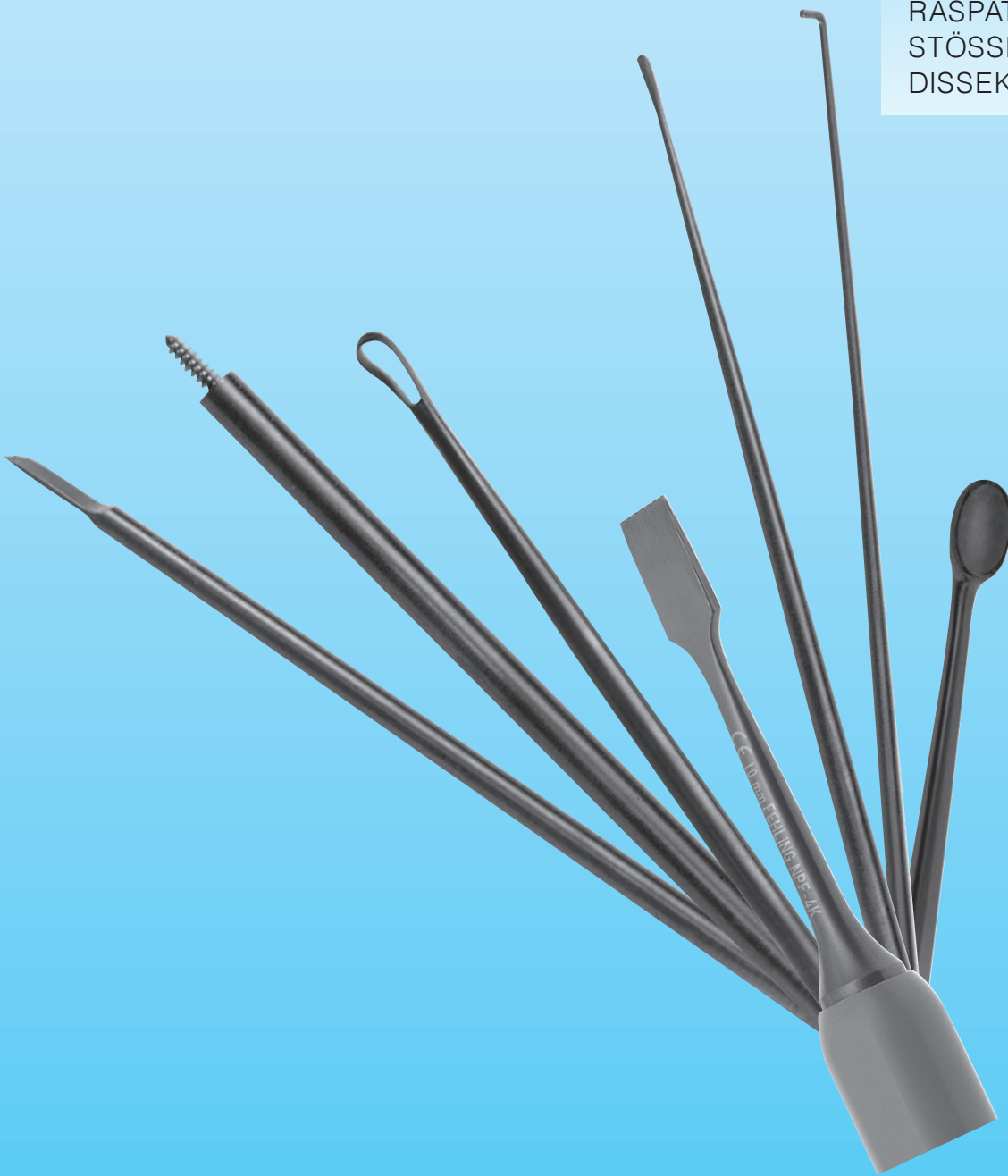
FEHLING...

... THE DIFFERENCE

7

CHISELS
CURETTES
RASPATORIES
TAMPERS
DISSECTORS

MEISSEL
SCHARFE LÖFFEL
RASPATORIEN
STÖSSEL
DISSEKTOREN



FEHLING
INSTRUMENTS

Hanauer Landstraße 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



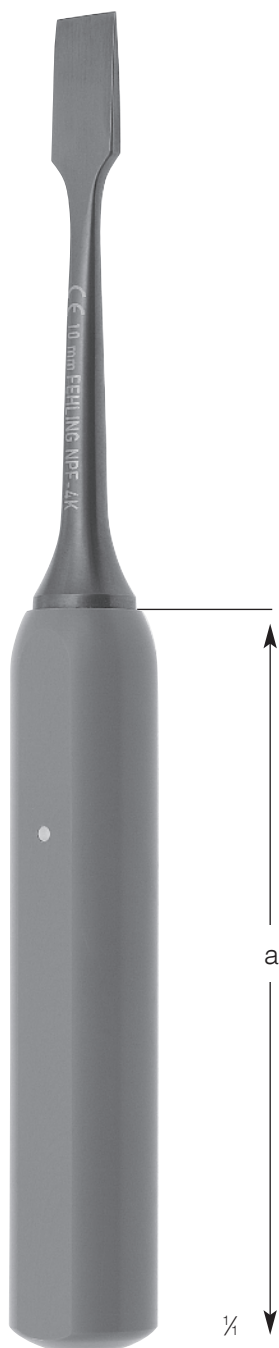
+49(0) 6188 - 9574.40



+49(0) 6188 - 9574.45



info@fehling-instruments.de



LEXER MINI
180 mm
a = 100 mm



FLAT CHISELS
FLACHMEISSEL

WIDTH BREITE	CERAMO®	UNCOATED UNBESCHICHTET
4 mm	NPF-1K	LBK-6K
6 mm	NPF-2K	LBK-7K
8 mm	NPF-3K	LBK-8K
10 mm	NPF-4K	LBK-9K
12 mm	NPF-5K	LBL-1K



GOUGES
HOHLMEISSEL

WIDTH BREITE	CERAMO®	UNCOATED UNBESCHICHTET
4 mm	NPG-1K	LBL-2K
6 mm	NPG-2K	LBL-3K
8 mm	NPG-3K	LBL-4K
10 mm	NPG-4K	LBL-5K
12 mm	NPG-5K	LBL-6K



FLAT CHISELS
FLACHMEISSEL

WIDTH BREITE	CERAMO®	UNCOATED UNBESCHICHTET
5 mm	NPH-1K	LBL-7K
7 mm	NPH-2K	LBL-8K
10 mm	NPH-3K	LBL-9K
15 mm	NPH-4K	LBM-1K
20 mm	NPH-5K	LBM-2K
25 mm	NPH-6K	LBM-3K
30 mm	NPH-7K	LBM-4K



LEXER
220 mm

a = 120 mm



GOUGES
HOHLMEISSEL

WIDTH BREITE	CERAMO®	UNCOATED UNBESCHICHTET
5 mm	NPI-1K	LBM-6K
7 mm	NPI-2K	LBM-7K
10 mm	NPI-3K	LBM-8K
15 mm	NPI-4K	LBM-9K
20 mm	NPI-5K	LBN-1K
25 mm	NPI-6K	LBN-2K
30 mm	NPI-7K	LBN-3K

CERAMO®



	STRAIGHT GERADE			ANGLED GEWINKELT	STRAIGHT ²⁾ GERADE ²⁾
WIDTH BREITE	L = 300 mm a = 120 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm	L = 300 mm a = 120 mm	L = 360 mm ¹⁾ a = 160 mm
4 mm	NPC-1K	NOX-1K	NOR-1K	NPD-1K	–
6 mm	NPC-2K	NOX-2K	NRN-5K	NPD-2K	–
8 mm	NPC-3K	NOX-3K	NOR-2K	NPD-3K	–
10 mm	NPC-4K	NOX-4K	NOR-3K	NPD-4K	NOW-7K
15 mm	NPC-5K	NOX-5K	NOR-4K	NPD-5K	NOW-8K
20 mm	NPC-6K	NOX-6K	NOR-5K	NPD-6K	NOW-9K
25 mm	NPC-7K	NOX-7K	NOR-6K	NPD-7K	–
30 mm	NPC-8K	NOX-8K	NOR-7K	NPD-8K	–



DAHMEN
OSTEOTOME

UNCOATED / UNBESCHICHTET

	STRAIGHT GERADE			ANGLED GEWINKELT	STRAIGHT ²⁾ GERADE ²⁾
WIDTH BREITE	L = 300 mm a = 120 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm	L = 300 mm a = 120 mm	L = 300 mm a = 120 mm
4 mm	LAZ-6K	LPN-1K	LBI-1K	LBA-7K	–
6 mm	LAZ-8K	LPN-2K	LBI-2K	LBA-9K	LBQ-2K
8 mm	LAZ-9K	LPN-3K	LBI-3K	LBB-1K	–
10 mm	LBA-1K	LPN-4K	LBI-4K	LBB-2K	LBQ-4K
15 mm	LBA-3K	LPN-5K	LBI-5K	LBB-4K	LBQ-5K
20 mm	LBA-4K	LPN-6K	LBI-6K	LBB-5K	LBQ-6K
25 mm	LBA-6K	LPN-7K	LBI-7K	LBB-7K	LBQ-7K
30 mm	LBA-0K	LPN-8K	LBI-8K	LBB-0K	–

L = TOTAL LENGTH / GESAMTLÄNGE

1) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT

2) ONE-SIDED CUT / EINSEITIGER SCHLIFF

CERAMO®

WIDTH BREITE	L = 300 mm a = 120 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm
4 mm	NPE-1K	NOY-1K	NOP-1K
6 mm	NPE-2K	NOY-2K	NOP-2K
8 mm	NPE-3K	NOY-3K	NOP-3K
10 mm	NPE-4K	NOY-4K	NOP-4K
15 mm	NPE-5K	NOY-5K	NOP-5K
20 mm	NPE-6K	NOY-6K	NOP-6K
25 mm	NPE-7K	NOY-7K	NOP-7K
30 mm	NPE-8K	NOY-8K	NOP-8K



DAHMEN
GOUGES
HOHLMEISSEL

UNCOATED / UNBESCHICHTET

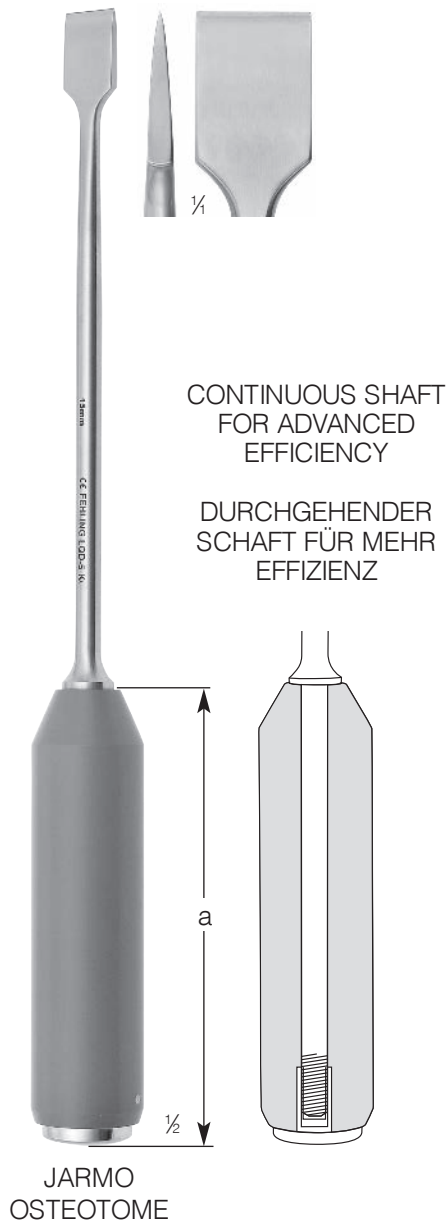
WIDTH BREITE	L = 300 mm a = 120 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm
4 mm	LBB-8K	LPP-1K	LBO-1K
6 mm	LBB-9K	LPP-2K	LBO-2K
8 mm	LBC-1K	LPP-3K	LBO-3K
10 mm	LBC-2K	LPP-4K	LBO-4K
15 mm	LBC-4K	LPP-5K	LBO-5K
20 mm	LBC-5K	LPP-6K	LBO-6K
25 mm	LBC-7K	LPP-7K	LBO-7K
30 mm	LBC-0K	LPP-8K	LBO-8K

L = TOTAL LENGTH / GESAMTLÄNGE

1) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT



WIDTH BREITE	CERAMO®		UNCOATED UNBESCHICHTET	
	125 mm	250 mm	125 mm	250 mm
4 mm	NPY-1	NPP-1	LBR-1	LBH-4
6 mm	NPY-2	–	LBR-2	LBH-5
8 mm	NPY-3	NPP-2	LBR-3	LBH-6
10 mm	NPY-4	NPP-3	LBR-4	LBH-8
12 mm	NPY-5	–	LBR-5	LBH-9
13 mm	–	NPP-4	–	LBJ-1
15 mm	NPY-6	–	LBR-6	LBJ-2
16 mm	–	NPP-5	–	LBJ-3
18 mm	–	NPP-6	–	LBJ-4
20 mm	–	NPP-7	–	LBJ-5
25 mm	–	NPP-8	–	LBJ-7
30 mm	–	NPP-9	–	LBJ-8
38 mm	–	NPQ-1	–	LBJ-9











WIDTH BREITE	L = 220 mm a = 120 mm	L = 300 mm a = 120 mm	L = 360 mm a = 160 mm
4 mm	–	LQD-1K	LPQ-1K
5 mm	LQA-1K	–	–
6 mm	–	–	LPQ-2K
7 mm	LQA-2K	–	–
8 mm	–	LQD-2K	LPQ-3K
10 mm	LQA-3K	LQD-3K	LPQ-4K
15 mm	LQA-4K	LQD-5K	LPQ-5K
20 mm	LQA-5K	LQD-7K	LPQ-6K
25 mm	LQA-6K	LQD-8K	LPQ-7K
30 mm	LQA-7K	LQD-9K	LPQ-8K

L = TOTAL LENGTH / GESAMTLÄNGE

CERAMO®



SIZE FIGUR	STRAIGHT GERADE				ANGLED GEWINKELT		
	L = 200 mm a = 115 mm	L = 285 mm a = 120 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm	L = 285 mm a = 120 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm
 0000	NRX-1K	NRB-5K	NRE-1K	NRW-1K	NRC-5K	NRF-1K	NRU-1K
 000	NRX-2K	NRB-6K	NRE-2K	NRW-2K	NRC-6K	NRF-2K	NRU-2K
 00	NRX-3K	NRB-7K	NRE-3K	NRW-3K	NRC-7K	NRF-3K	NRU-3K
 0	NRX-4K	NRB-8K	NRE-4K	NRN-1K	NRC-8K	NRF-4K	NRU-4K
 1	NRX-5K	NPA-1K	NRE-5K	NRW-4K	NPB-1K	NRF-5K	NRU-5K
 2	NRX-6K	NPA-2K	NRE-6K	NRW-5K	NPB-2K	NRF-6K	NRU-6K
 3	NRX-7K	NPA-3K	NRE-7K	NRN-2K	NPB-3K	NRF-7K	NRU-7K
 4	NRX-8K	NPA-4K	NRE-8K	NRW-6K	NPB-4K	NRF-8K	NRU-8K

L = TOTAL LENGTH / GESAMTLÄNGE

1) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT

CERAMO®



CLOWARD
a = 115 mm





SIZE FIGUR	STRAIGHT GERADE		45° ANGLED 45° GEWINKELT		BACKWARDS RÜCKWÄRTS	
	L = 200 mm	L = 230 mm	L = 200 mm	L = 230 mm	L = 200 mm	L = 230 mm
1/4 000000	-	NZJ-0K	-	NZJ-9K	-	-
1/4 00000	-	NZJ-5K	-	NZJ-6K	NRV-0K	-
1/4 0000	NPM-1K	NZJ-3K	NPN-1K	NZJ-4K	-	-
1/4 000	NPM-2K	NZJ-1K	NPN-2K	NZJ-2K	NRV-1K	NPR-4K
1/4 00	NPM-3K	NZJ-7K	NPN-3K	NZJ-8K	NRV-2K	NPR-5K
1/4 0	NPM-4K	NZM-1K	NPN-4K	NZM-0K	NRV-3K	NPR-6K
1/4 1	NPM-5K	NZM-3K	NPN-5K	NZM-2K	NRV-4K	NPR-7K
1/4 2	NPM-6K	NZM-5K	NPN-6K	NZM-4K	NRV-5K	NPR-8K
1/4 3	NPM-7K	NZM-7K	NPN-7K	NZM-6K	NRV-6K	NPR-9K
1/4 4	NPM-8K	NZM-9K	NPN-8K	NZM-8K	NRV-7K	NPS-4K
1/4 5	NPM-9K	NZN-1K	NPN-9K	NZN-0K	NRV-8K	NPS-5K
1/4 6	NPM-0K	NZN-3K	NPN-0K	NZN-2K	NRV-9K	NPS-6K

L = TOTAL LENGTH / GESAMTLÄNGE

HANDLES MADE OF PROPYLUX / GRIFFMATERIAL = PROPYLUX

CERAMO®













SIZE FIGUR	STRAIGHT GERADE			CURVED GEBOGEN	
	L = 285 mm a = 120 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm
 1	NZO-0K	NZO-2K	NRP-1K	NZO-3K	NRP-2K
 2	NZO-1K	NZO-4K	NRP-3K	NZO-5K	NRP-4K
 3	NZE-2K	NZO-6K	NRN-3K	NZO-7K	NRP-5K
 4	NZE-0K	NZO-8K	NRP-6K	NZO-9K	NRP-7K







L = TOTAL LENGTH / GESAMTLÄNGE

1) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT

CERAMO®





	 1/4	 1/4	 1/4
SIZE FIGUR	STRAIGHT GERADE L = 230 mm	45° ANGLED GEWINKELT L = 230 mm	90° ANGLED GEWINKELT L = 230 mm
 1/4 000000	-	-	NRQ-8
 1/4 00000	-	-	NRQ-9
 1/4 000	NRR-0	NRR-5	-
 1/4 00	NRR-1	NRR-6	-
 1/4 0	NRR-2	NRR-7	-
 1/4 2	NRR-3	NRR-8	-
 1/4 4	NRR-4	NRR-9	-


	 1/4		 1/4		 1/4	
CUP SIZE LÖFFEL- GRÖSSE	STRAIGHT GERADE		ANGLED GEWINKELT		BACKWARDS RÜCKWÄRTS	
	L = 230 mm	L = 290 mm	L = 230 mm	L = 290 mm	L = 230 mm	L = 290 mm
 1/4 1,8 mm	NRG-2	NRD-2	NRG-5	NRD-5	NRG-9	NRD-8
 1/4 3,6 mm	NRG-1	NRD-1	NRG-4	NRD-4	NRG-8	NRD-7
 1/4 5,2 mm	NRG-0	NRD-0	NRG-3	NRD-3	NRG-6	NRD-6

L = TOTAL LENGTH / GESAMTLÄNGE

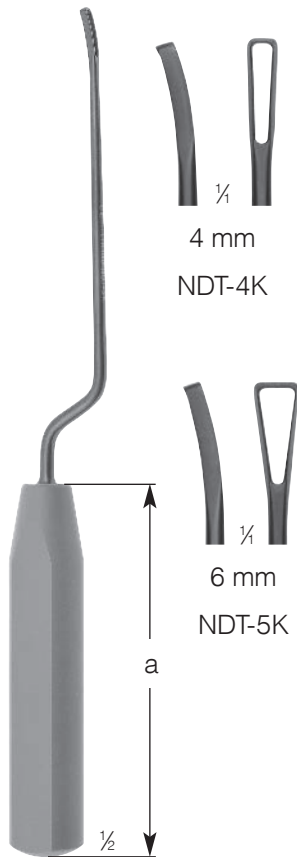
CERAMO®



	WIDTH BREITE	L = 210 mm a = 120 mm	L = 265 mm a = 120 mm	L = 370 mm a = 160 mm
 30°	6 mm	NPK-3K	NPJ-0K	-
	8 mm	NPK-4K	NPK-0K	NPK-1K
	10 mm	-	NPO-9K	NPK-2K
 45°	6 mm	-	NPK-5K	-
	8 mm	-	NPK-6K	NPJ-1K
	10 mm	-	-	NPJ-2K

	WIDTH BREITE	L = 450 mm ¹⁾ a = 200 mm
 10°	11 mm	NRN-7K




L = TOTAL LENGTH / GESAMTLÄNGE
1) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT



LANKSCH
L = 215 mm
a = 100 mm



L = 250 mm
a = 120 mm

 5 x 8	NPK-7K
 5 x 10	NPK-8K
 5 x 14	NPK-9K

L = TOTAL LENGTH / GESAMTLÄNGE

CERAMO®



225 mm
NZV-4



4,5 mm
SHARP
SCHARF



225 mm



2,0 mm
BLUNT
STUMPF
NZV-6



4,5 mm
BLUNT
STUMPF
NZV-5

FIND MICRO DISSECTORS
IN CHAPTER 10.

MIKRODISSEKTOREN SIND
IN KAPITEL 10 ZU FINDEN.



KRÄMER
185 mm
NRK-5



10 mm
SHARP
SCHARF



KRÄMER
185 mm
NRK-6



10 mm
SHARP
SCHARF



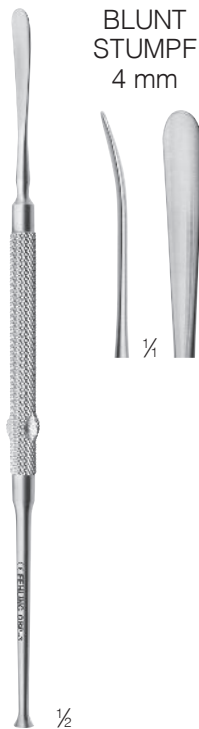
KILLIAN
185 mm
NRH-1



FREER
195 mm
NRH-3



FREER/YASARGIL
185 mm
NRH-4



FREER
190 mm
OBP-3



FREER
200 mm
OBT-4



EVERHARDT
230 mm
NHX-0

CERAMO®



a = 100 mm



3 x 185 mm
NRI-0K



6 x 190 mm
NRI-1K



6 x 190 mm
NRI-2K



6 x 190 mm
NRI-3K



a = 115 mm



14 x 190 mm
NRI-4K

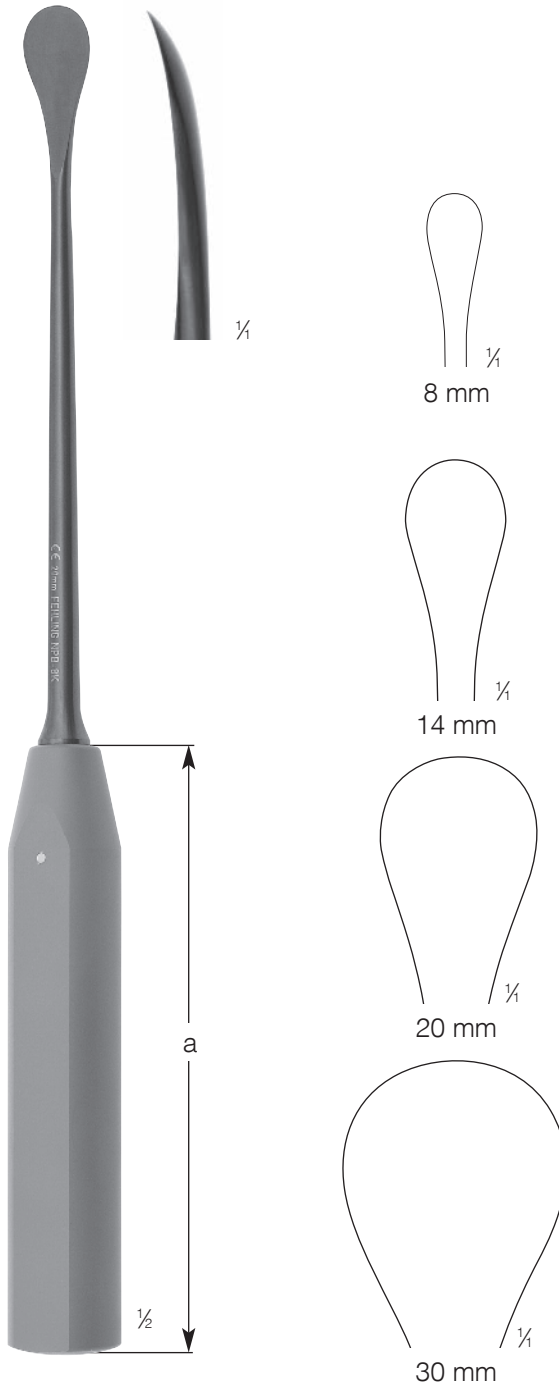


14 x 190 mm
NRI-5K



13 x 185 mm
NRI-6K

CERAMO®




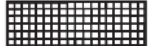




L = 280 mm a = 120 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm
NPA-6K	NPB-6K	NPF-6K
NPA-7K	NPB-7K	NPF-7K
NPA-8K	NPB-8K	NPF-8K
-	NZR-1K	-

L = TOTAL LENGTH / GESAMTLÄNGE

1) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT

CERAMO®







	L = 220 mm a = 120 mm	L = 300 mm a = 160 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm
 1/4 6 x 6 mm	-	NUA-2K	NUB-5K	NUB-1K
 1/4 6 x 18 mm	-	NUA-1K	NUB-6K	NUB-2K
 1/4 Ø 3 mm	NUA-8K	-	-	-
 1/4 Ø 5 mm	NUA-7K	NUA-4K	NUB-7K	NUB-3K
 1/4 Ø 10 mm	NUA-6K	NUA-3K	NUB-8K	NUB-4K
 1/4 4 x 10 mm	-	NUA-5K	NUB-9K	-

L = TOTAL LENGTH / GESAMTLÄNGE

1) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT



CERAMO® SYPERT

	L = 300 mm a = 160 mm	L = 360 mm a = 160 mm	L = 450 mm ¹⁾ a = 200 mm
 1/4 3 x 8 mm	NRA-1K	NUC-5K	NUC-1K
 1/4 4 x 10 mm	NRA-2K	NUC-6K	NUC-2K
 1/4 5 x 15 mm	NRA-4K	NUC-7K	NUC-3K
 1/4 6 x 20 mm	NRA-5K	NUC-8K	NUC-4K





L = TOTAL LENGTH / GESAMTLÄNGE

1) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT

HANDLES MADE OF PROPYLUX / GRIFFMATERIAL = PROPYLUX






160 mm

 1/4 Ø 3 mm	LBW-2
 1/4 Ø 5 mm	LBW-4
 1/4 Ø 7 mm	LBW-6
 1/4 Ø 9 mm	LBW-8



CERAMO®
MICRO TAMPER
MIKROSTÖSSEL
160 mm

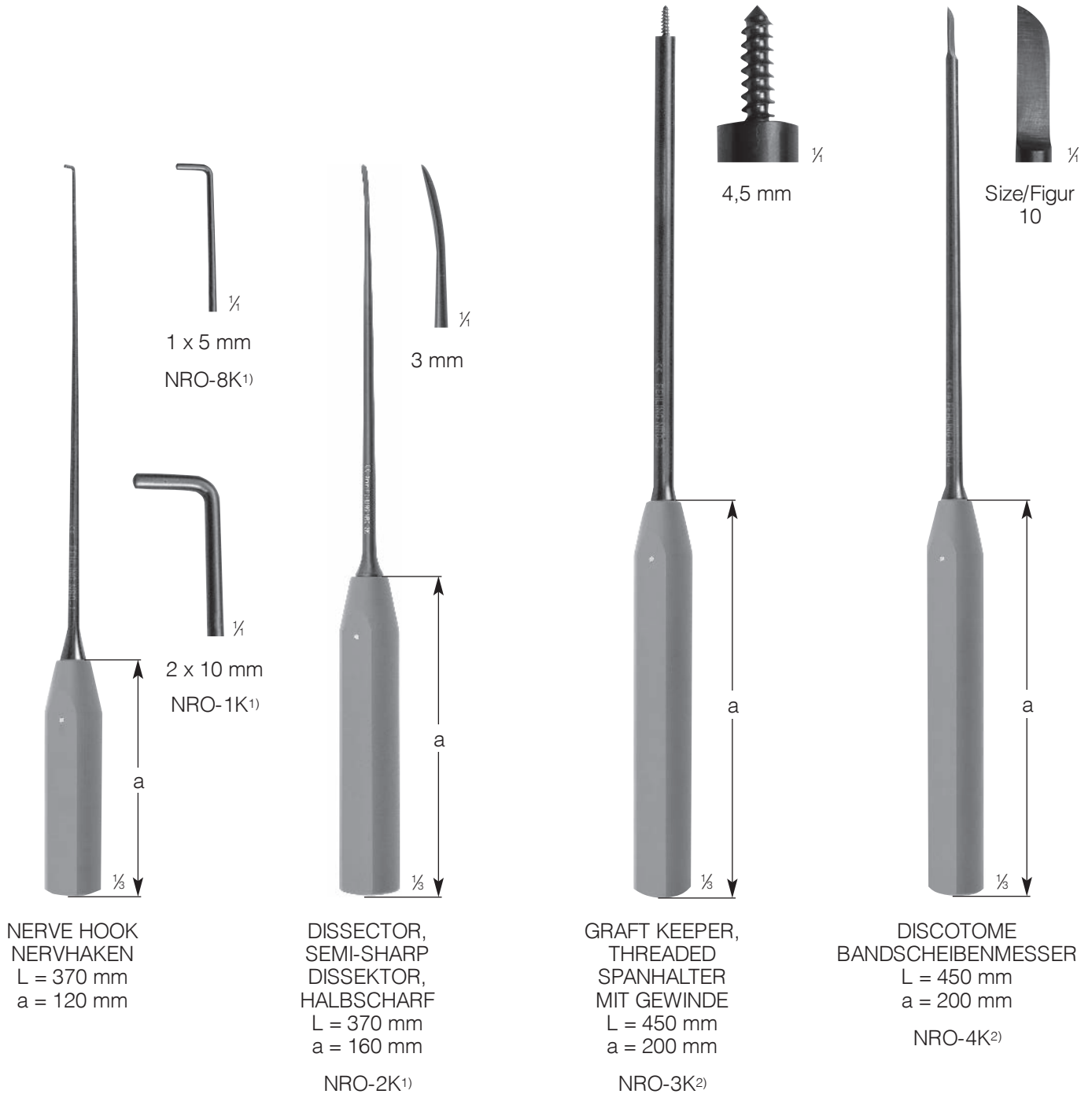


 1/4 Ø 2 mm	NUX-1
 1/4 Ø 4 mm	NUX-2
 1/4 Ø 6 mm	NUX-3



CERAMO®
HANDLE
GRIFF
ABB-1

CERAMO®



NERVE HOOK
NERVHAKEN
L = 370 mm
a = 120 mm

**DISSECTOR,
SEMI-SHARP
DISSEKTOR,
HALBSCHARF**
L = 370 mm
a = 160 mm
NRO-2K¹⁾

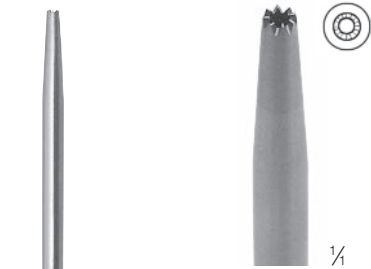
**GRAFT KEEPER,
THREADED
SPANHALTER
MIT GEWINDE**
L = 450 mm
a = 200 mm
NRO-3K²⁾

**DISCOTOME
BANDSCHEIBENMESSER**
L = 450 mm
a = 200 mm
NRO-4K²⁾

L = TOTAL LENGTH / GESAMTLÄNGE

1) ONE-SIDED CALIBRATION / EINSEITIG GRADUIERT

2) BOTH-SIDED CALIBRATION / BEIDSEITIG GRADUIERT



OUTER / ÄUSSERER Ø: 7 mm
INNER / INNERER Ø: 2 mm

CANULATED AWL
KANULIERTER PFRIEM
230 mm
NTM-1



FOUREDGED AWL
VIERKANT-PFRIEM
140 mm
LAC-8



COTTLE
MALLET
HAMMER
190 mm
Ø 30 mm
240 g
LAR-2



MEASURING RANGE
MESSBEREICH
60 mm



ENDO
INTERVERTEBRAL CALIBRE
INTERVERTEBRALKALIBER
370 mm
NUD-7

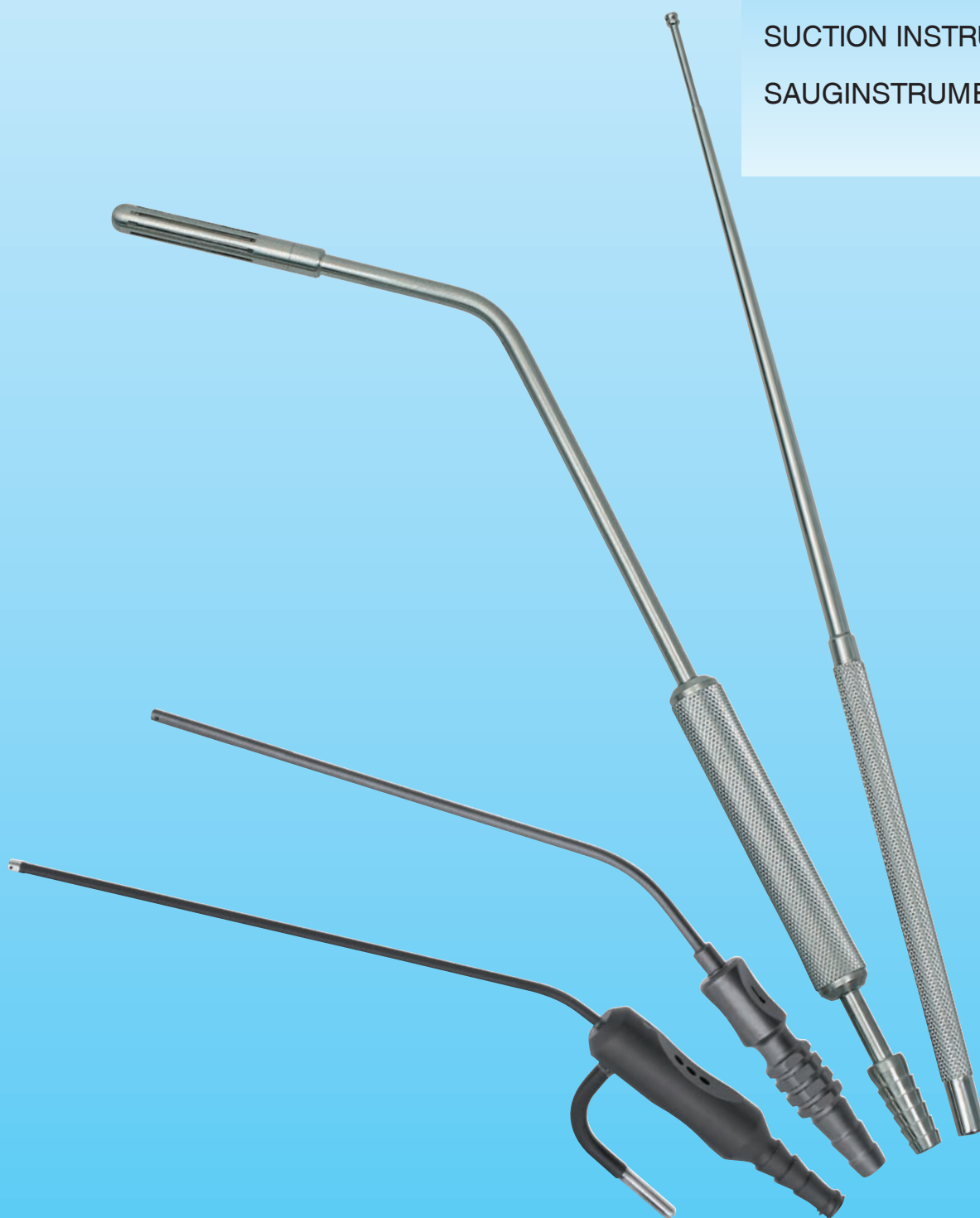
FEHLING...

... THE DIFFERENCE

8

SUCTION INSTRUMENTS

SAUGINSTRUMENTE



FEHLING
INSTRUMENTS

Hanauer Landstraße 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49(0) 6188 - 9574.40

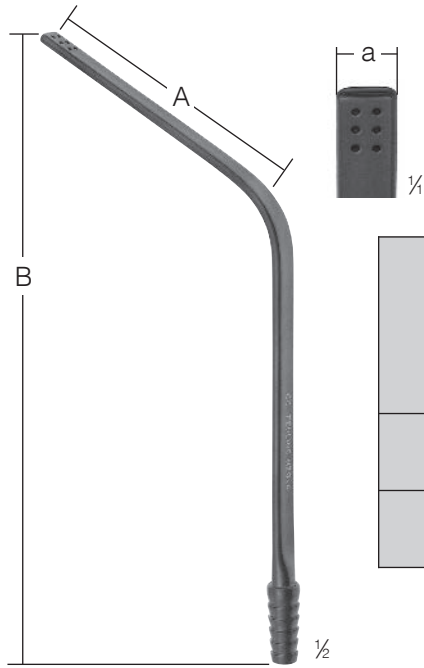


+49(0) 6188 - 9574.45



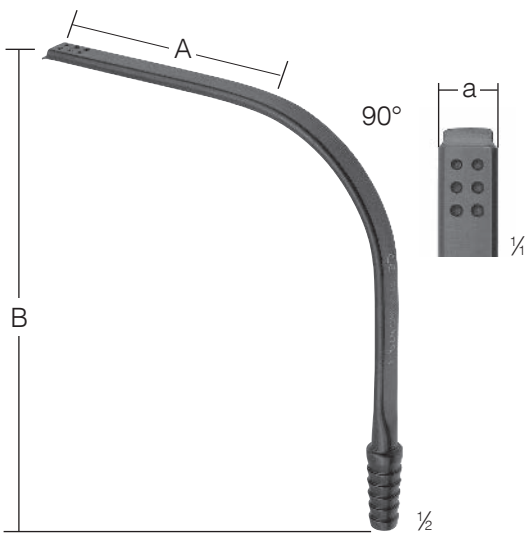
info@fehling-instruments.de

CERAMO®



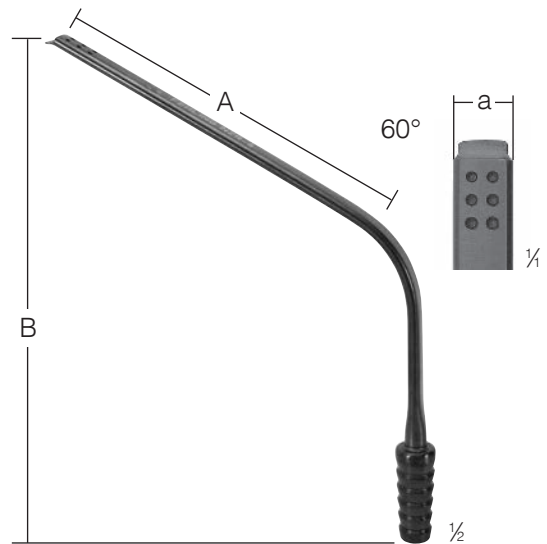
WIDTH BREITE a	LENGTH LÄNGE A / B		
	70 / 155 mm	80 / 160 mm	90 / 165 mm
6 mm	NZQ-7V	NZQ-8V	NZQ-9V
8 mm	NZQ-3V	NZQ-4V	NZQ-5V

SCHROEDER
SUCTION SPATULA
SAUGSPATEL



SUCTION NERVE ROOT RETRACTOR
SAUG-NERWURZELHAKEN

WIDTH BREITE a	LENGTH LÄNGE A / B	
	95 / 135 mm	175 / 210 mm
6 mm	NZQ-2	NZR-3
8 mm	NZQ-1	NZR-2

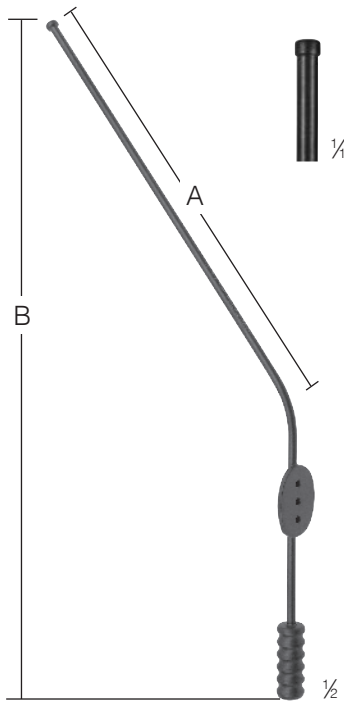


SUCTION NERVE ROOT RETRACTOR
SAUG-NERWURZELHAKEN

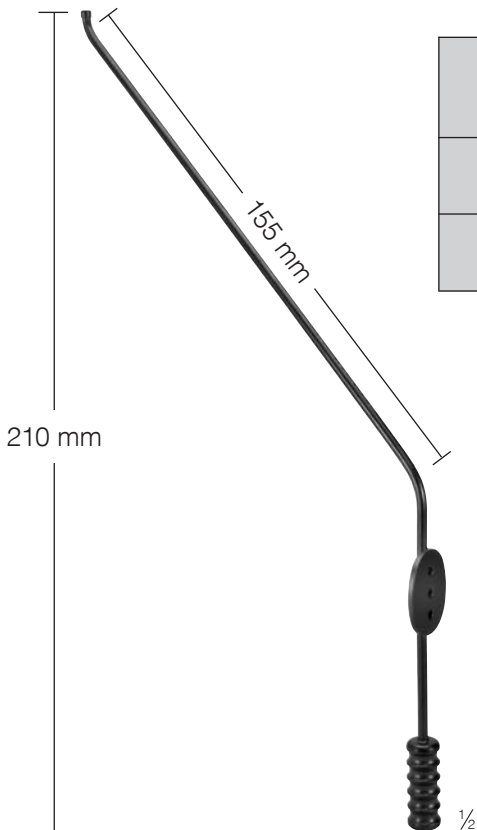
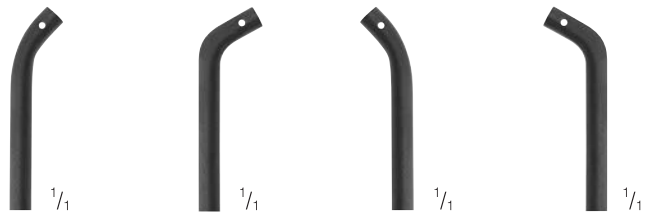
WIDTH BREITE a	LENGTH LÄNGE A / B	
	95 / 135 mm	175 / 260 mm
6 mm	NZR-6	NZR-5
8 mm	-	NZR-4

CERAMO® SCHICK

CEREBRAL SUCTION TUBE
CEREBRALSauger

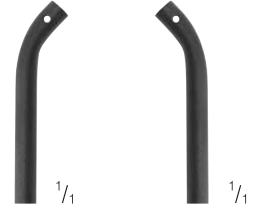


Ø TUBE ROHR	LENGTH LÄNGE A / B	
	130 / 180 mm	170 / 210 mm
2,5 mm	HAV-7V	HAV-8V
3,0 mm	HAV-9V	HAW-0V



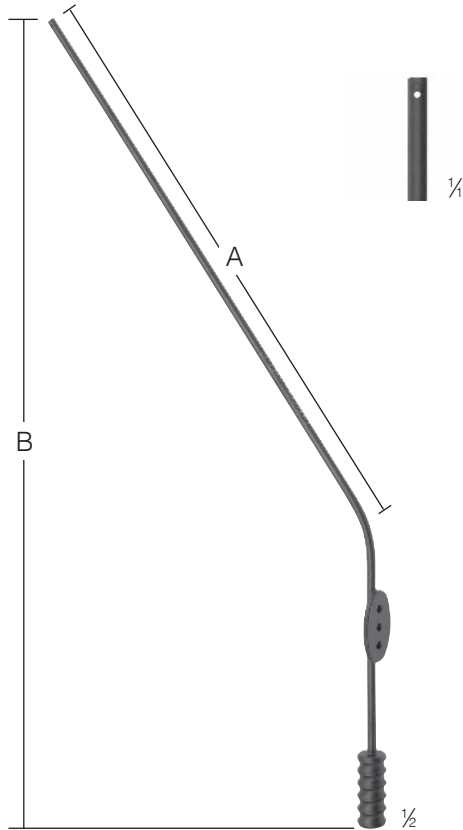
Ø TUBE ROHR	ANGLE			
	45°	60°	45°	60°
2,5 mm	HAW-5V	HAW-7V	HAW-6V	HAW-8V
3,0 mm	HBA-1V	HBA-3V	HBA-2V	HBA-4V

CERAMO®



Ø TUBE ROHR	45°	45°
3,0 mm	HBA-5	HBA-6

MICRO SUCTION TUBE
MIKROSAUGER



Ø TUBE ROHR	LENGTH LÄNGE A / B	
	130 / 180 mm	170 / 210 mm
1,5 mm	HAV-5	HAV-6
2,5 mm	HAV-1	HAV-2
3,0 mm	HAV-3	HAV-4

SCHICK
MICRO SUCTION TUBE
MIKROSAUGER

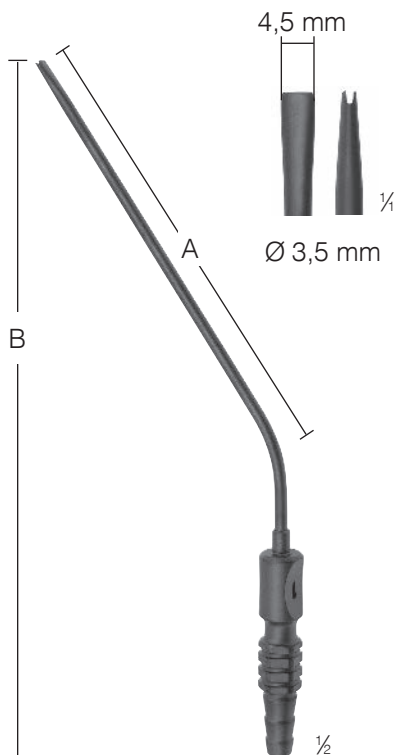
CERAMO®



MICRO SUCTION TUBE
MIKROSAUGER
200 mm



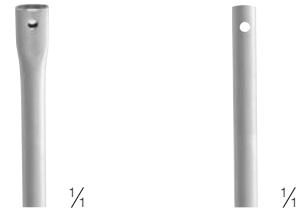
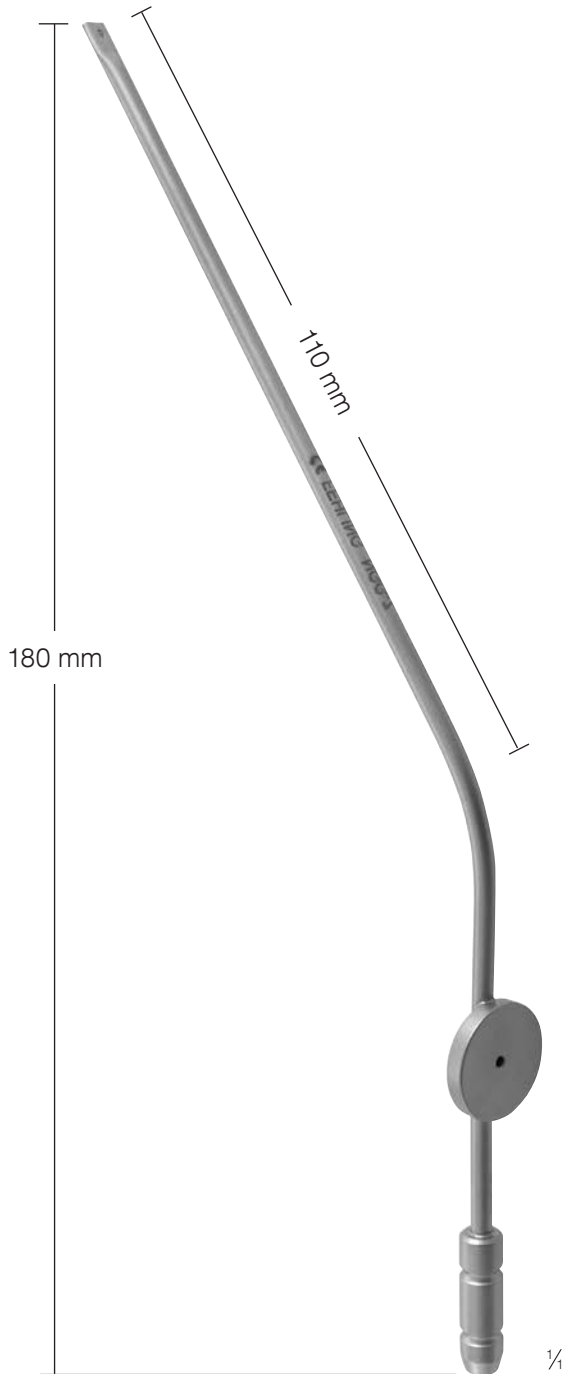
Ø TUBE ROHR	45°	60°
2,0 mm	HAW-1	HAW-2
3,0 mm	HAW-3	HAW-4



DISSECTING ASPIRATOR
DISSEKTIONSSAUGER

LENGTH LÄNGE A / B	
120 / 190 mm	NZV-3
220 / 250 mm	NZV-0

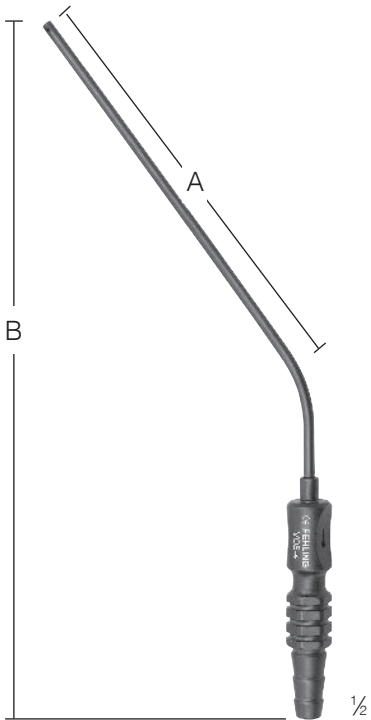
SUCTION INSTRUMENT WITH FINGER CUT OFF
SAUGER MIT SAUGUNTERBRECHUNG



Ø TUBE ROHR		
3,0 mm	NGG-4	NGG-6
	NGG-7	
4,0 mm	NGT-0	-
	NGS-6	-

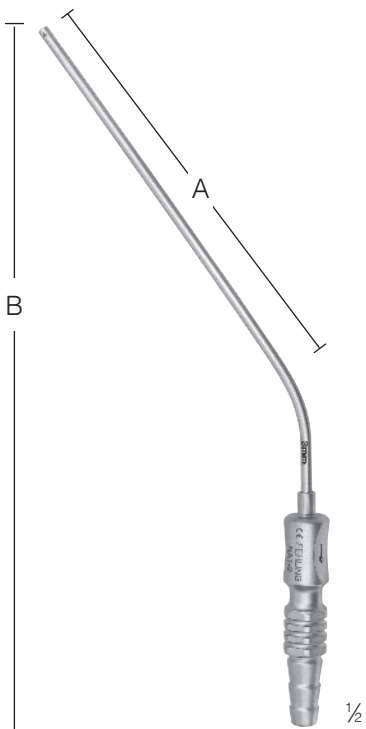
CERAMO®

FRAZIER



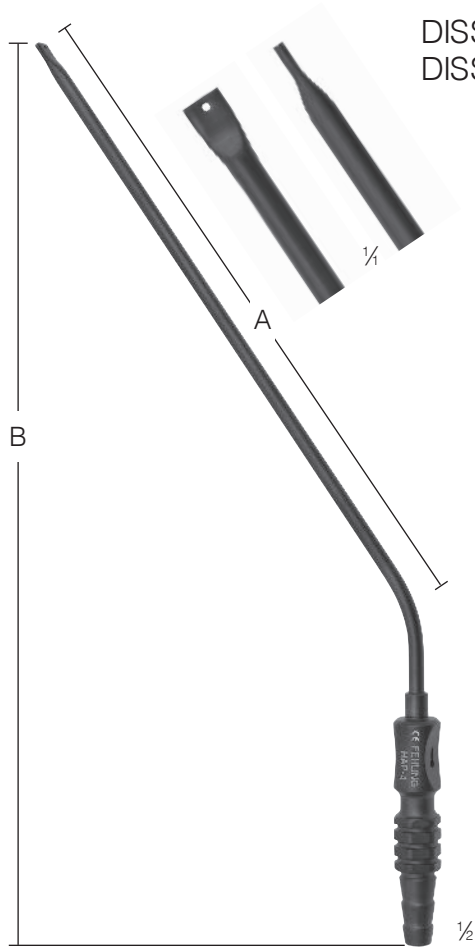
CERAMO®

Ø TUBE ROHR	LENGTH LÄNGE A / B		
	115 / 180 mm	145 / 200 mm	210 / 250 mm
1,0 mm	–	VOC-1	VOE-4
1,5 mm	–	VOC-7	–
2,0 mm	VOB-2	VOC-2	VOE-5
2,5 mm	VOB-3	VOC-3	VOE-6
3,0 mm	VOB-4	VOC-4	VOE-7
4,0 mm	VOB-5	VOC-5	VOE-8
5,0 mm	VOB-6	VOC-6	VOE-9



UNCOATED
UNBESCHICHTET

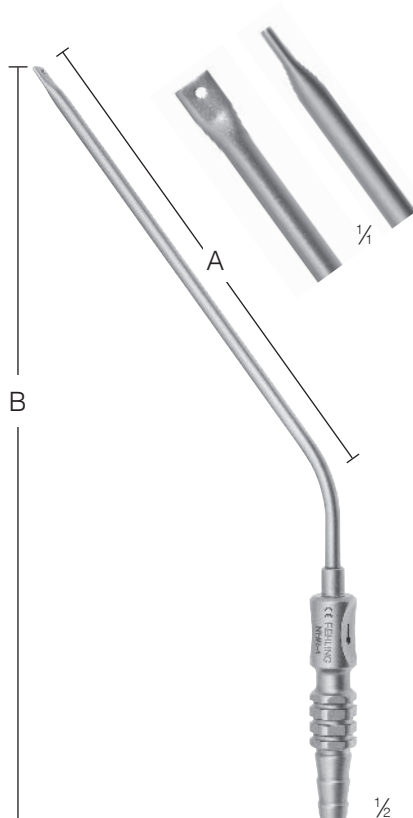
Ø TUBE ROHR	LENGTH LÄNGE A / B		
	115 / 180 mm	145 / 200 mm	210 / 250 mm
1,0 mm	–	HAR-1	–
1,5 mm	HAT-5	–	–
2,0 mm	NAT-7	HAR-2	NHR-8
2,5 mm	NAT-8	HAR-0	NHS-0
3,0 mm	NAT-9	HAR-3	NHR-9
4,0 mm	NAU-1	HAR-4	NHS-1
5,0 mm	NAU-2	HAP-9	NHS-2



DISSECTION CANNULAS
DISSEKTIONSSAUGER

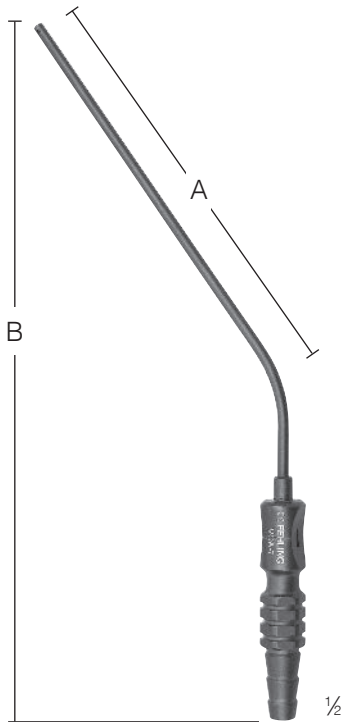
Ø TUBE ROHR	LENGTH LÄNGE A / B	
3,0 mm	125 / 190 mm	HAP-5
4,0 mm	175 / 245 mm	HAP-4

CERAMO®
KINTZEL



Ø TUBE ROHR	LENGTH LÄNGE A / B	
3,0 mm	110 / 170 mm	NHR-0
4,0 mm	120 / 190 mm	NHR-4
		NGG-5
4,0 mm	140 / 210 mm	NHA-8

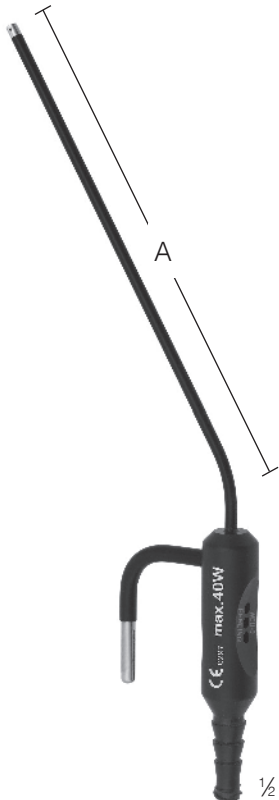
CERAMO®

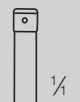



MALLEABLE
BIEGBAR

Ø TUBE ROHR	LENGTH LÄNGE A / B	
	120 / 180 mm	160 / 210 mm
1,0 mm	VOA-5	VOB-0
2,0 mm	VOA-6	VOA-1
3,0 mm	VOA-7	VOA-2
4,0 mm	VOA-8	VOA-3
5,0 mm	VOA-9	VOA-4
6,0 mm	-	VOA-0

CERAMO®
SUCTION CANNULA
SAUGKANÜLE



Ø TIP SPITZE	
 3,3 mm	WEU-0
 4,0 mm	WEU-1

SUTTER MEDIZINTECHNIK
NON-STICK*
MONOPOLAR SUCTION TUBE
MONOPOLARER SAUGER
A = 130 mm




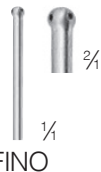




CLEANING BRUSH
REINIGUNGSBÜRSTE
360 mm
WEU-4

* limited distribution territory
eingeschränktes Vertriebsrecht

JAMIESON

DISSECTION CANNULAS
DISSEKTIONSSAUGER

	Ø		LENGTH LÄNGE	
	HOLE / BALL LOCH / KUGEL			
	0,5 mm	270 mm	MMT-1	
	1,0 mm	210 mm	MNF-0	
		270 mm	MNF-6	
	1,5 mm	270 mm	MMA-7	
	1,0 mm	260 mm	MMC-0	
	1,5 mm	270 mm	MME-5	
	1,5 mm	290 mm	MME-1	
	1,5 mm	290 mm	MME-2	
	0,5 mm	a = 70 mm 270 mm	15°	MME-3
			30°	MMJ-0
	1,0 mm	a = 60 mm 270 mm	30°	MMJ-6
			15°	MME-4
	1,0 mm	a = 70 mm 270 mm	15°	MME-4
			30°	MMB-0



YANKAUER SUCTION TUBE
YANKAUER SAUGROHR
285 mm
HAA-4



VALVULAR SUCTION TUBE
SAUGER FÜR KLAPPENCHIRURGIE



CERAMO®
SUCTION CANNULA FOR
VALVE DECALCIFICATION
ENTKALKUNGSSAUGER
240 mm
MNF-5



HLM-ASPIRATOR
HLM-SAUGER
280 mm
MEL-7

300 mm	350 mm*
MNO-0	MNO-8

* particularly for MICS MVR
speziell für MICS MKR/MKE



225 mm
MCE-9



ANDREWS PYNCHON
240 mm

PEDIATRIC
PÄDIATRISCH

Ø	
3,0 mm	MNO-4
4,2 mm	MNO-5



245 mm
MCE-8



210 mm
MNE-5

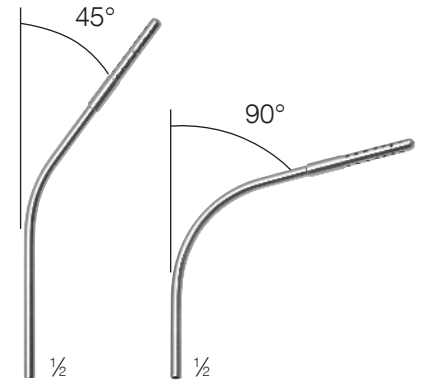


SEBENING
180 mm
MNE-8

GRECO



PEDIATRIC
PÄDIATRISCH



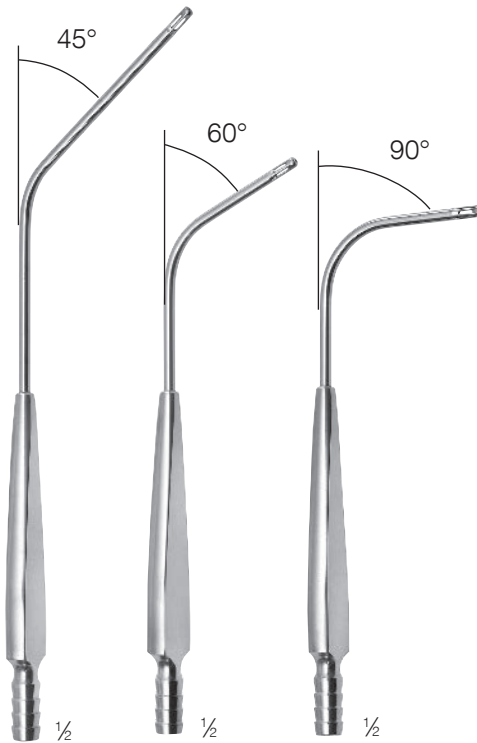
HLM-CANNULA
HLM-KANÜLE

DETACHABLE BASKET / KORB ABNEHMBAR

Ø TUBE / ROHR	180 mm	160 mm
3,3 mm	MNM-1	MNM-2
5,0 mm	MNM-3	MNM-4

DETACHABLE BASKET / KORB ABNEHMBAR

Ø TUBE / ROHR	95 mm	80 mm
3,3 mm	MNM-5	MNM-6
5,0 mm	MNM-7	MNM-8



Ø TUBE / ROHR	210 mm	180 mm	150 mm
3,3 mm	MNL-2	MNL-1	MNL-3
5,0 mm	MNL-5	MNL-4	MNL-6

GRECO

PEDIATRIC
PÄDIATRISCH



VENTRICULAR SUCTION CANNULA FOR 1/4" TUBE
VENTRIKELSAUGER FÜR 1/4" SCHLAUCH



Ø 6 mm
L 23 mm
MKN-8



Ø 7 mm
L 25 mm
MKK-5

PEDIATRIC VENTRICULAR SUCTION CANNULA
KINDER-VENTRIKELSAUGER



Ø 16 mm	9 x 12 mm
MCC-0	MCC-1



HEPARIN CANNULA
HEPARIN KANÜLE

Ø TUBE ROHR	LENGTH LÄNGE		
	48 mm	55 mm	160 mm
1,2 mm	HAH-9	HAI-2	—
2,0 mm	—	—	HAI-3

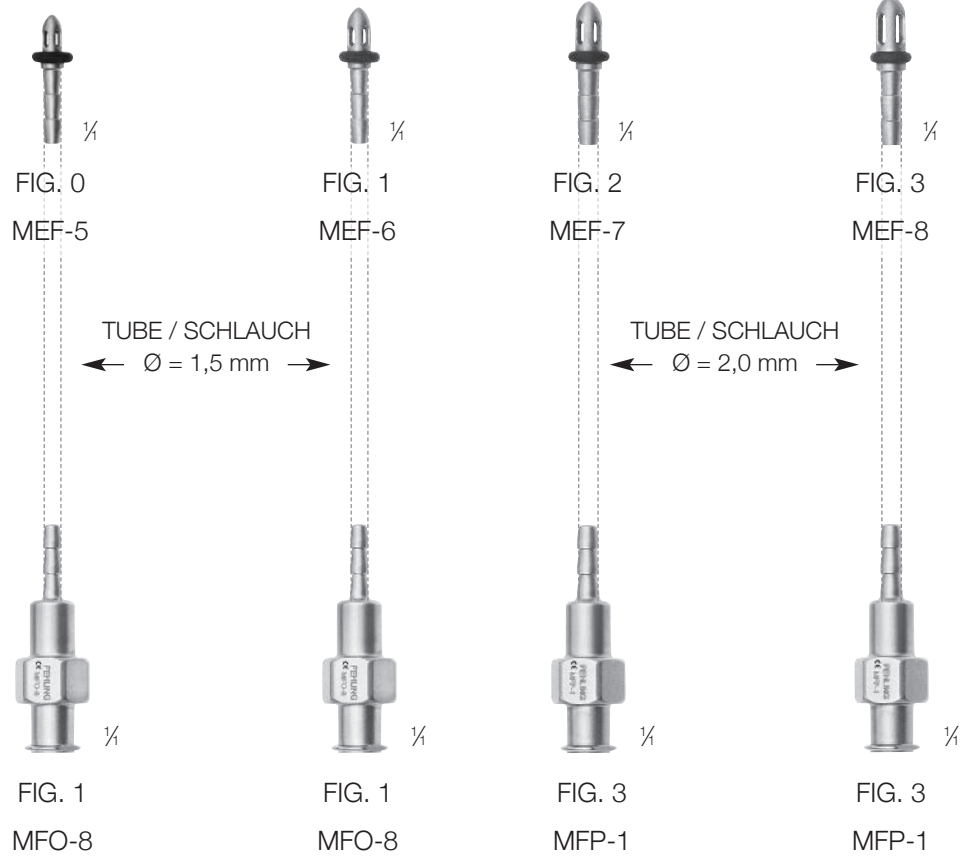
MALLEABLE
BIEGSAM

Ø TUBE ROHR		
1,2 mm	VAD-3	VAD-4
1,5 mm	VAD-5	VAD-6
2,0 mm	VAD-0	—



BUTTONED CANNULA
KOPFKANÜLE
80 mm

VASCULAR IRRIGATOR
VASKULARSPÜLKOPF



LUER-LOCK ADAPTER
LUER-LOCK-ANSATZ

Your Distributor
Ihr Vertriebspartner

Please note that not all products are available in every country.
Wir weisen darauf hin, dass einzelne Produkte oder Produktgruppen in manchen Ländern nicht verfügbar sein können.

The dimensions listed in the catalog are nominal measurements. Actual values may differ slightly due to variations in production.
Bei denen im Katalog angegebenen Maßen handelt es sich um Nennmaße. Die tatsächlichen Werte können fertigungsbedingt abweichen.

FEHLING...

... THE DIFFERENCE

10

MICRO DISSECTION
AND RETRACTING
INSTRUMENTS

MIKRO
DISSEKTIONS- UND
HALTEINSTRUMENTE



FEHLING
INSTRUMENTS

Hanauer Landstr. 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49 (0) 61 88 - 95 74.40



+49 (0) 61 88 - 95 74.45



info@fehling-instruments.de

CERAMO®

FI MICRO SET
FI MIKRO SET



STRAIGHT
GERADE

ABB-1

HANDLES
HANDGRIFFE



BAYONET
BAJONETT

ABB-2



STERILISATION AND STORAGE TRAY
STERILISATIONS- UND AUFBEWAHRUNGSBOX

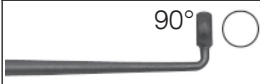

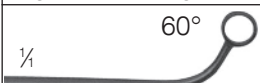
210 x 180 mm

NUM-0

210 x 230 mm

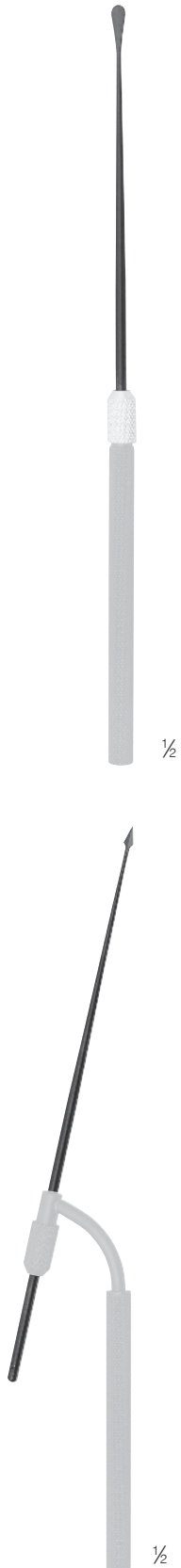
NVM-0



		160 mm	210 mm
 90° $\frac{1}{4}$ ring curette / Ringkurette	2 mm	NUM-1	NVM-1
	4 mm	NUM-2	NVM-2
	6 mm	NUM-3	NVM-3
 45° $\frac{1}{4}$ ring curette / Ringkurette	2 mm	NUM-4	NVM-4
	4 mm	NUM-5	NVM-5
	6 mm	NUM-6	NVM-6
 45° $\frac{1}{4}$ ring curette / Ringkurette	2 mm	NUM-7	NVM-7
	4 mm	NUM-8	NVM-8
	6 mm	NUM-9	NVM-9
 40° $\frac{1}{4}$ ring curette / Ringkurette	2 mm	NUR-1	NVR-1
	4 mm	NUR-2	NVR-2
	6 mm	NUR-3	NVR-3
 60° $\frac{1}{4}$ ring curette / Ringkurette	2 mm	NUR-4	NVR-4
	4 mm	NUR-5	NVR-5
	6 mm	NUR-6	NVR-6

CERAMO®

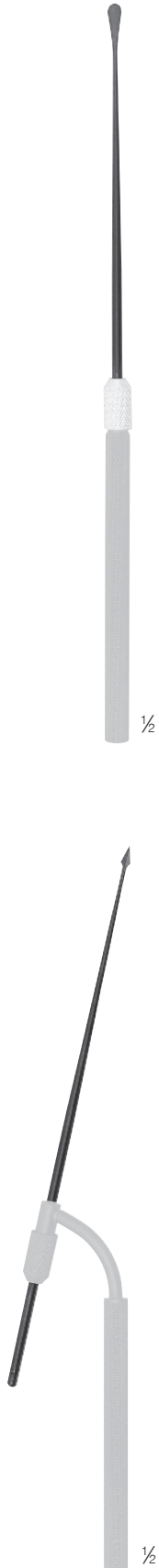
FI MICRO SET
FI MIKRO SET




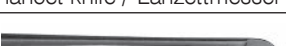
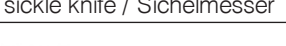
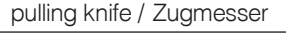







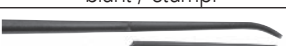

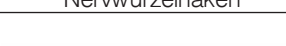







		160 mm	210 mm	
1/4	dissector / Dissektor sharp / scharf	1 mm	NUN-1	NVN-1
		2 mm	NUN-2	NVN-2
		3 mm	NUN-3	NVN-3
1/4	dissector / Dissektor blunt / stumpf	1 mm	NUN-4	NVN-4
		1,5 mm	NUN-9	NVN-9
		2 mm	NUN-5	NVN-5
		3 mm	NUN-6	NVN-6
1/4	dissector / Dissektor blunt / stumpf	4 mm	NUN-7	NVN-7
		4 mm	NUN-8	NVN-8
1/4	bone curette / scharfer Löffel	2 mm	NUO-1	NVO-1
		3 mm	NUO-2	NVO-2
		4 mm	NUO-3	NVO-3
1/4	bone curette / scharfer Löffel	2 mm	NUO-4	NVO-4
		3 mm	NUO-5	NVO-5
		4 mm	NUO-6	NVO-6
1/4	nerv hook / Nervhaken	1 x 2 mm	NUT-4	NVT-4
		1 x 4 mm	NUT-5	NVT-5
1/4	nerv hook / Nervhaken	1 x 2 mm	NUP-1	NVP-1
		1 x 3 mm	NUP-2	NVP-2
		1 x 4 mm	NUP-6	NVP-6
		1 x 5 mm	NUP-4	NVP-4
1/4	nerv hook / Nervhaken	1 x 8 mm	NUP-5	NVP-5
		0,4 x 2 mm	NUP-7	NVP-7
1/4	nerv hook / Nervhaken semi sharp / halbscharf	0,4 x 3 mm	NUP-8	NVP-8
		1 x 3 mm	NUS-0	NVS-0
1/4	nerv hook / Nervhaken	1 x 3 mm	NUP-9	NVP-9
		1 x 5 mm	NUS-1	NVS-1
		1 x 8 mm	NUS-2	NVS-2
1/4	nerv hook / Nervhaken	1 x 5 mm	NUS-3	NVS-3
1/4	nerv hook / Nervhaken pointed / spitz	1 x 3 mm	NUS-9	NVS-9
1/4	knot- / thread lifter / Knoten- / Fadenheber	0,4 x 4 mm	NUT-0	-

CERAMO®

FI MICRO SET
FI MIKRO SET



		160 mm	210 mm
	1/4 needle / Nadel	NUS-8	NVS-8
	1/4 ball probe / Knopfsonde	1 mm NUS-4	NVS-4
	1/4 lancet knife / Lanzettmesser	NUS-6	NVS-6
	1/4 sickle knife / Sichelmesser	NUS-7	NVS-7
	1/4 pulling knife / Zugmesser	3,5 mm NUP-3	NVP-3
	1/4 disc knife / Tellermesser	2 mm NUS-5	-
	1/4 disc knife / Tellermesser	4 mm NUT-1	NVT-1
	1/4 45° disc knife / Tellermesser	2 mm NUT-2	NVT-2
	1/4 45° disc knife / Tellermesser	3 mm NUR-0	-
	1/4 45° disc knife / Tellermesser	4 mm NUT-3	NVT-3
	1/4 micro knife / Mikromesser	NUT-6	-
	1/4 45° disc dissector / Tellerdissektor	2 mm NUT-7	-
	1/4 disc dissector blunt / stumpf	4 mm NUT-8	-
	1/4 LANKSCH nerve root retractor / Nerwurzelhaken	3 mm NUO-7	-
	1/4 LANKSCH nerve root retractor / Nerwurzelhaken	5 mm NUO-8	-
	1/4 tamper / Stößel	2 mm NUX-1	-
	1/4 tamper / Stößel	4 mm NUX-2	-
	1/4 tamper / Stößel	6 mm NUX-3	-
POLYTOM KNIVES* POLYTOM MESSER*		160 mm	
	1/4 pulling knife / Zugmesser	4 mm NUL-1	-
	1/4 pushing knife / Schubmesser	4,5 mm NUL-2	-
	1/4 micro knife / Mikromesser	FIGURE 11 FIGUR 11 NUT-9	-

*EXTRA HARD CARBON SURFACE
















*EXTREM HARTE KOHLENSTOFFOBERFLÄCHE

CERAMO®

MICDIS SET



190 mm

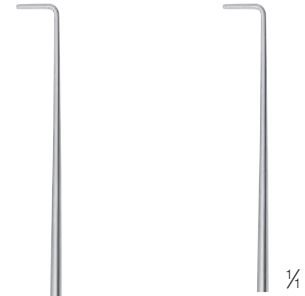
	1 mm	NTC-1
	2 mm	NTC-2
	3 mm	NTC-3
¼ dissector / Dissektor		
	1 mm	NTC-6
	1,5 mm	NTC-7
	2 mm	NTC-8
¼ dissector / Dissektor		
	1,2 mm	NTC-5
	2,8 mm	NTC-4
¼ elevator / Elevator		
	2 mm	NTC-9
¼ hook / Häkchen semi-sharp / halbscharf		
	2 mm	NTD-1
¼ hook / Häkchen blunt / stumpf		
	3 mm	NTD-2
¼ hook / Häkchen semi-sharp / halbscharf		
		NTD-3
¼ needle / Nadel semi-sharp / halbscharf		
	1 x 2 mm	NTD-4
¼ bone curette / scharfer Löffel		
	1 x 2 mm	NTD-5
¼ bone curette / scharfer Löffel		
	3 mm	NTD-6
¼ nerve hook / Nervhaken		



¼

STERILIZATION AND STORAGE TRAY
STERILISATIONS- UND AUFBEWAHRUNGSBEHÄLTER
210 x 230 x 20 mm

NBX-4



¼

3 mm	NBP-4
5 mm	NBP-5
8 mm	NBP-6
14 mm	NEW-4

FEHLING NBP-5

NERVE HOOK
NERVHAKEN
230 mm

¼



BONE CURETTES
SCHARFE LÖFFEL

	45° 	90° 	45°
Ø 3 mm	Ø 3 mm	Ø 3 mm	Ø 3 mm
NBC-3	NBC-4	NBC-5	NBC-6

45° 	90°
Ø 3 mm	Ø 3 mm
UP / AUF	NBC-7
DOWN / AB	NBC-8
RIGHT / RECHTS	NBC-9
LEFT / LINKS	NBD-1
	NBD-2
	NBD-3
	NBD-4
	NBD-5

ALL MODELS ALSO
AVAILABLE WITH
CERAMO SURFACE

ALLE MODELLE AUCH
MIT CERAMO-OBER-
FLÄCHE ERHÄLTlich

RING CURETTES
RINGKÜRETTEN

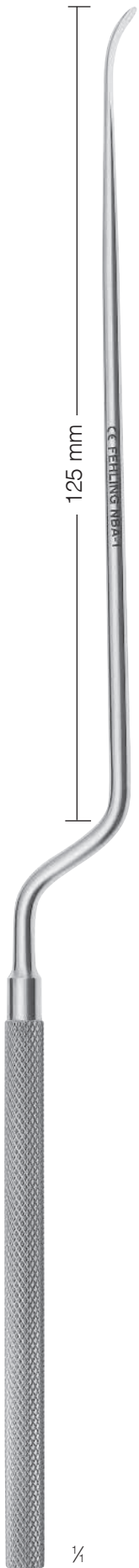
45° 	45° 	90° 	90°
Ø 2,5 mm	Ø 4,0 mm	Ø 2,5 mm	Ø 4,0 mm
NBB-6	NBB-7	NBB-4	NBB-5

DISSECTORS
DISSEKTOREN

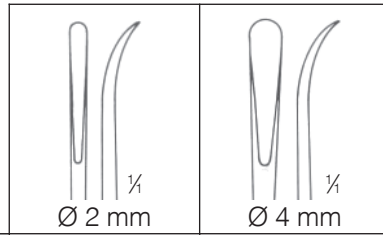
SICKLE KNIFE
SICHELMESSER

	2 mm	4 mm	3 x 5 mm	1/4
UP / AUF	NAZ-6	NBA-1	NBJ-6	NAY-9
DOWN / AB	NAZ-7	NBA-2	-	NAZ-1
RIGHT / RECHTS	NAZ-8	-	NBK-7	NAY-7
LEFT / LINKS	NAZ-9	-	NBL-2	NAY-8

240 mm

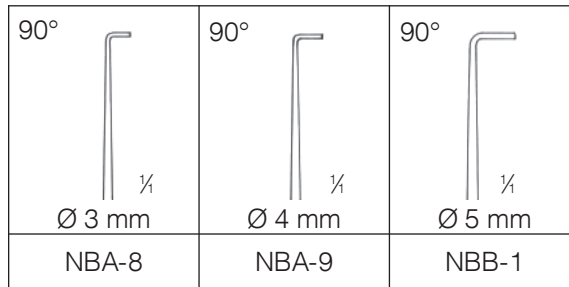


RASPATORIES
RASPATORIEN



UP / AUF	NBB-8	NBC-1
DOWN / AB	NBB-9	NBC-2

NERVE HOOKS
NERVHAKEN



ALL MODELS ALSO
AVAILABLE WITH
CERAMO SURFACE

ALLE MODELLE AUCH
MIT CERAMO-OBER-
FLÄCHE ERHÄLTICH











	90° 2 mm semi-sharp / halbscharf	90° 2 mm blunt / stumpf	45° 3 mm blunt / stumpf	90° 3 mm blunt / stumpf	90° 3 mm ballpointed / mit Knopf
UP / AUF	NBH-8	NBH-9	NBJ-1	NBJ-5	NBJ-3
RIGHT / RECHTS	NBJ-7	NBJ-8	NBJ-9	NBK-6	NBK-4
LEFT / LINKS	NBK-1	NBK-2	NBK-3	NBL-1	NBK-8

240 mm

CERAMO®



260 mm
a = 120 mm


	0,5 mm	TOR-7
$\frac{1}{4}$ needle holder / Nadelhalter	1,0 mm	TOQ-1
	0,5 mm	TOR-8
$\frac{1}{4}$ needle holder / Nadelhalter	1,0 mm	TOQ-2
	2,0 mm	TOQ-3
$\frac{1}{4}$ spoon pliers / Löffelzange	4,0 mm	TOQ-4
	2,0 mm	TOQ-5
$\frac{1}{4}$ spoon pliers / Löffelzange		
	pointed spitz	TOR-1
$\frac{1}{4}$ scissors / Schere	blunt stumpf	TOR-3
	pointed spitz	TOR-2
$\frac{1}{4}$ scissors / Schere	blunt stumpf	TOR-4
	blunt stumpf	TOR-9
$\frac{1}{4}$ scissors / Schere	pointed spitz	TOR-0
	blunt stumpf	TOQ-0
$\frac{1}{4}$ scissors / Schere		
	0,5 mm	TOR-5
$\frac{1}{4}$ forceps / Pinzette		
	0,5 mm	TOR-6
$\frac{1}{4}$ forceps / Pinzette		

ROTATABLE SHAFT
DREHBARER SCHAFT



CERAMO®

FOR / FÜR YASARGIL CLIPS



		CLIP ROTATABLE / DREHBAR	
		 ¼	
TOTAL LENGTH GESAMTLÄNGE		230 mm	270 mm
LENGTH a LÄNGE a		80 mm	120 mm
CLIP SIZE CLIP GRÖÖE	MINI	TOQ-9	TOQ-7
	STANDARD	TOQ-8	TOQ-6

ROTATABLE SHAFT
DREHBARER SCHAFT



MEMORY

FOR / FÜR YASARGIL CLIPS

		CLIP FIXED / STARR			CLIP ROTATABLE / DREHBAR		
		 ¼			 ¼		
LENGTH a LÄNGE a		70 mm	90 mm	110 mm	70 mm	90 mm	110 mm
CLIP SIZE CLIP GRÖÖE	MINI	NIB-1	NIB-2	NIB-3	NIB-7	NIB-8	NIB-9
	STANDARD	NIC-0	NIC-1	NIB-0	NIB-4	NIB-5	NIB-6

MALLEABLE SHAFT / BIEGBARER SCHAFT

The shafts of MEMORY clip applying forceps are constructed of shape-memory metal. They are malleable in normal O.R. temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperatures, such as those found in the autoclave, the instruments regain their initial shape.

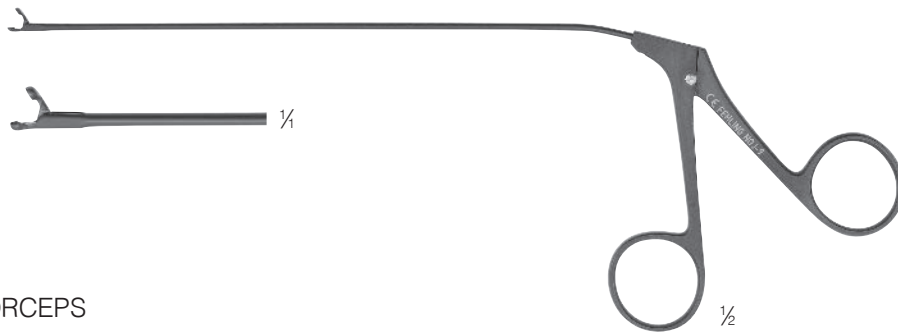
MEMORY Clipanlegezangen haben einen Schaft aus Formgedächtnismetall. Sie sind bei normaler OP-Temperatur biegsam. Sie können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.

CERAMO® NICOLA



SCISSORS
SCHEREN

	straight / gerade	up / aufwärts	down / abwärts	left / links	right / rechts
160 mm	NOJ-1	NOJ-2	NOJ-3	NOJ-4	NOJ-5
	NBR-9	-	-	-	-
200 mm	NTF-1	NTF-4	NTF-5	NTF-3	NTF-2
	TOM-6	-	-	TOM-8	TOM-7
	NBS-1	NBS-2	NBS-3	NBS-5	NBS-4
250 mm	NOL-7			NOL-8	NOL-9



GRASPING FORCEPS
FASSZANGEN

	straight / gerade	up / aufwärts	down / abwärts	left / links	right / rechts
160 mm	NOJ-6	NOJ-7	NOJ-8	NOJ-9	NOK-0
	NBR-3	-	-	-	-
180 mm	-	-	-	NOM-0	NOI-9
200 mm	NTF-6	NTF-7	NTF-8	NTF-9	NTG-0
	TOM-1	-	-	-	-
	NBR-4	NBR-5	NBR-6	NBR-8	NBR-7
250 mm	NOK-8	-	-	-	-

 TITANIUM / TITAN

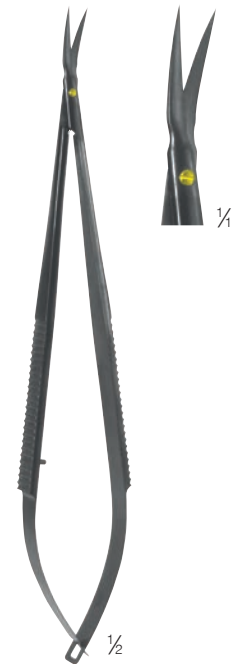
 UNCOATED / UNBESCHICHTET

CERAMO®



LOWER BLADE SERRATED
UNTERES BLATT GEZAHNT

STRONG SCISSORS
STARKE SCHERE
180 mm
NIC-5

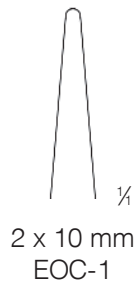


NC MICRO SCISSORS
NC MIKROSCHERE
160 mm
BBO-1B

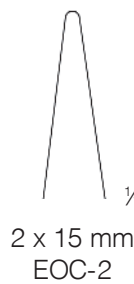
12 mm



TITANIUM
SPATULA
SPATEL
200 mm



2 x 10 mm
EOC-1



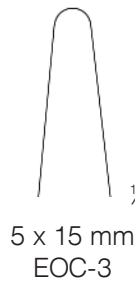
2 x 15 mm
EOC-2



5 x 10 mm
EOC-6



20 mm
EOC-8



5 x 15 mm
EOC-3



8 x 15 mm
EOC-7



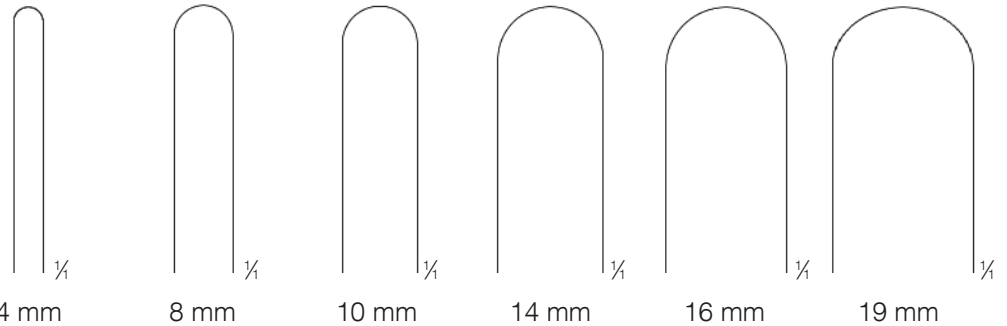
5 x 20 mm
EOC-4



17,5 mm

MALLEABLE / BIEGBAR

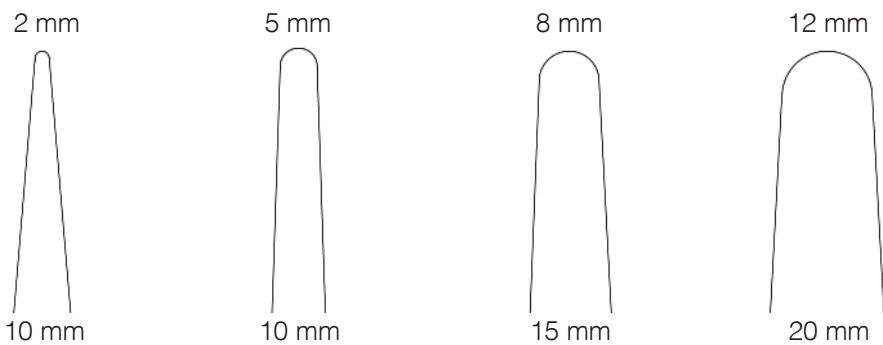
CERAMO® SUPERPLAST



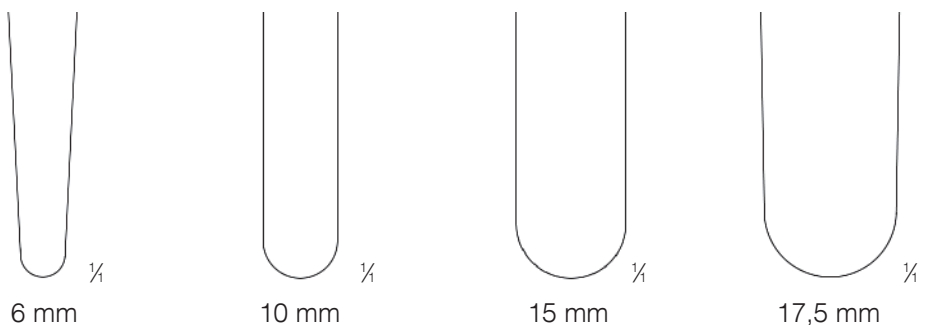
STANDARD	EOI-1	EOI-2	EOI-3	EOI-4	EOI-5	EOI-9
STRONG STARK	EOI-6	EOI-7	EOI-8	EOK-9	-	-

SUPERPLAST Instruments are constructed of shapememory metal. They are malleable in normal O.R. temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperatures, such as those found in the autoclave, the instruments regain their initial shape.

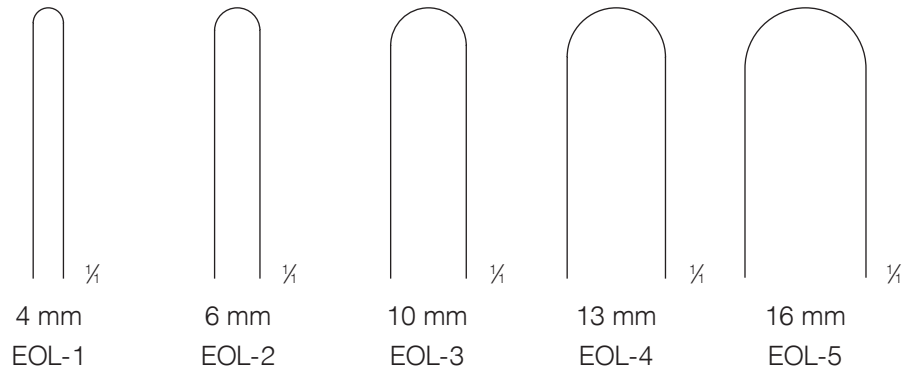
SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie sind bei normaler OP-Temperatur biegsam. Sie können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.



STANDARD	EOK-1	EOK-2	EOK-3	EOK-4
STRONG STARK	EOK-5	EOK-8	EOK-7	-

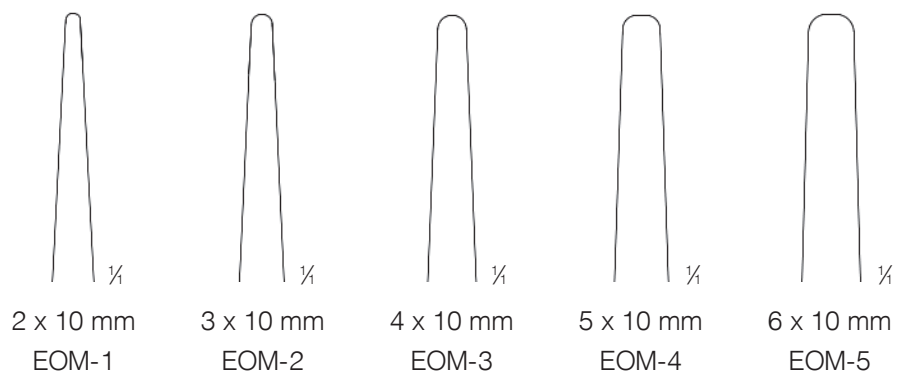


CERAMO® SUPERPLAST

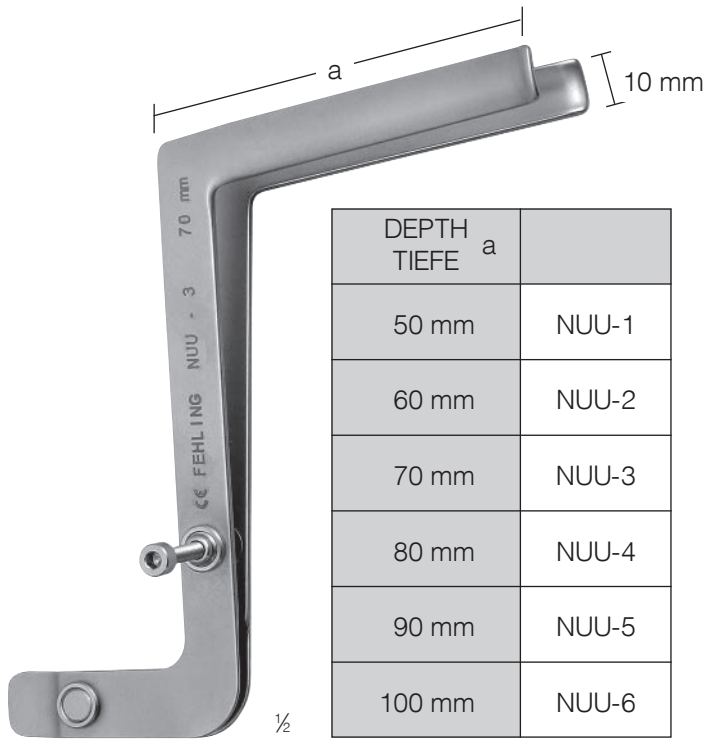


SUPERPLAST Instruments are constructed of shapememory metal. They are malleable in normal O.R. temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperatures, such as those found in the autoclave, the instruments regain their initial shape.

SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie sind bei normaler OP-Temperatur biegsam. Sie können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.



Shafts suitable for all common head rest systems.
Die Schäfte passen in alle gängigen Kopfhaltensysteme.



DEPTH TIEFE	a
50 mm	NUU-1
60 mm	NUU-2
70 mm	NUU-3
80 mm	NUU-4
90 mm	NUU-5
100 mm	NUU-6

PERNECZKY TITANIUM
MICRO RETRACTOR
MIKROSPREIZER

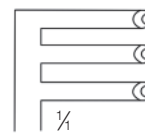


SUPPORT FOR LEYLA-RETRACTOR
SPATELHALTER FÜR LEYLA-RETRAKTOR

NEA-2



exemplary configuration
Konfigurationsbeispiel



3 x 3 TEETH/ZÄHNE
SEMI-SHARP
HALBSCHARF

DIETZ
160 mm
ECP-5H

CONCEPT

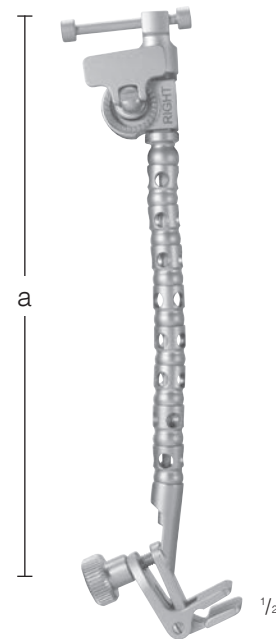
CEREBELLAR RETRACTOR
CEREBELLUM SPREIZER



exemplary configuration
Konfigurationsbeispiel



BODY
RAHMEN
190 mm
NDN-4



FLEXIBLE ARM WITH SPATULA ADAPTER
SPANNARM MIT SPATELHALTER

SEGMENTS GLIEDER	LENGTH LÄNGE ^a	
7	135 mm	NDO-1
8	145 mm	NDN-6
11	175 mm	NDN-9
15	215 mm	NDO-0

FIND SPATULAS ON PAGE 12 + 13
PASSENDE SPATEL AUF SEITE 12 + 13



CERAMO®
TRANSNASAL SPECULUM
TRANSNASALES SPECULUM

70 x 12 mm	NVG-1V
	NVL-1V
80 x 12 mm	NVG-2V
	NVL-2V
90 x 12 mm	NVG-3V
	NVL-3V
100 x 12 mm	NVG-4V
	NVL-4V
110 x 12 mm	NVG-5V
	NVL-5V

TITANIUM / TITAN



CERAMO®
HEXAGON WRENCH
FOR SPECULUM
SECHSKANTSCHLÜSSEL
FÜR SPEKULUM

NVG-9



KILLIAN
NASAL SPECULUM
NASENSPEKULUM

with locking screw
mit Stellschraube



KILLIAN
NASAL SPECULUM
NASENSPEKULUM

37 x 7 mm	OAT-9
52 x 7 mm	OAU-1
75 x 7 mm	OAU-2

36 x 7 mm	OAT-5
56 x 7 mm	OAT-6
75 x 7 mm	OAT-7
90 x 7 mm	OAT-8

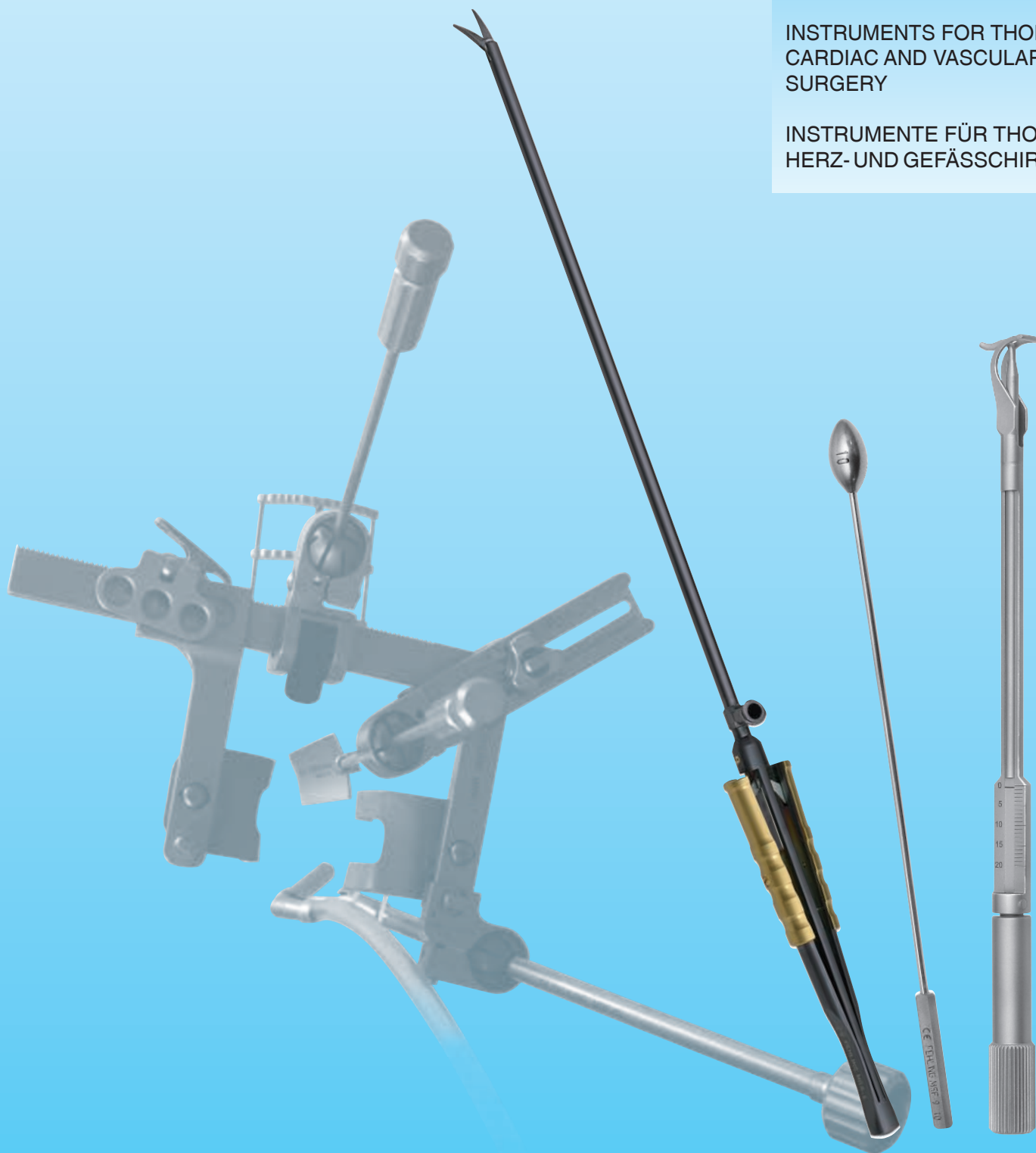
FEHLING...

... THE DIFFERENCE

11

INSTRUMENTS FOR THORACIC,
CARDIAC AND VASCULAR
SURGERY

INSTRUMENTE FÜR THORAX-,
HERZ- UND GEFÄSSCHIRURGIE



FEHLING
INSTRUMENTS

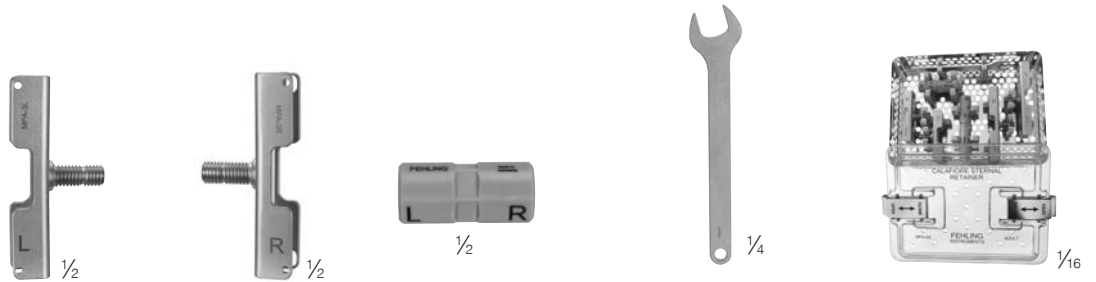
Hanauer Landstraße 7A · 63791 Karlstein/Germany · www.fehling-instruments.de

 +49(0) 6188 - 9574.40

 +49(0) 6188 - 9574.45

 info@fehling-instruments.de

CALAFIORE STERNAL RETAINER STERNUMOFFENHALTER



	STERNUM BLADE STERNUMBLATT		SCREW NUT MUTTER <i>SINGLE USE</i> ☒	FLAT WRENCH GABELSCHLÜSSEL	STORAGE TRAY LAGERUNGS- BEHÄLTER
	LEFT LINKS	RIGHT RECHTS			
NEONATAL	MPC-1L 7 x 30 mm*	MPC-1R 7 x 30 mm*	MPA-5 7 x 30 mm** Ø 8	MPB-1	MPC-0P "PEDIATRIC"
PEDIATRIC	MPB-7L 10 x 18 mm* MPA-2L 10 x 50 mm*	MPB-7R 10 x 18 mm* MPA-2R 10 x 50 mm*	MPA-6 45 x 65 mm** Ø 12	MPB-2	
ADULT	MPA-3L 15 x 70 mm*	MPA-3R 15 x 70 mm*	MPA-9 45 x 65 mm** Ø 16 MPA-7 70 x 90 mm** Ø 16 MPA-8 95 x 115 mm** Ø 16	MPB-3	MPC-0A "ADULT"
ADIPOSIS	MPA-4L 20 x 100 mm*	MPA-4R 20 x 100 mm*			MPC-0C "CURVED"
OSTEOPOROSIS	MPB-5L 15 x 30 mm* MPB-6L 20 x 30 mm*	MPB-5R 15 x 30 mm* MPB-6R 20 x 30 mm*			

*blade size / Blattgröße

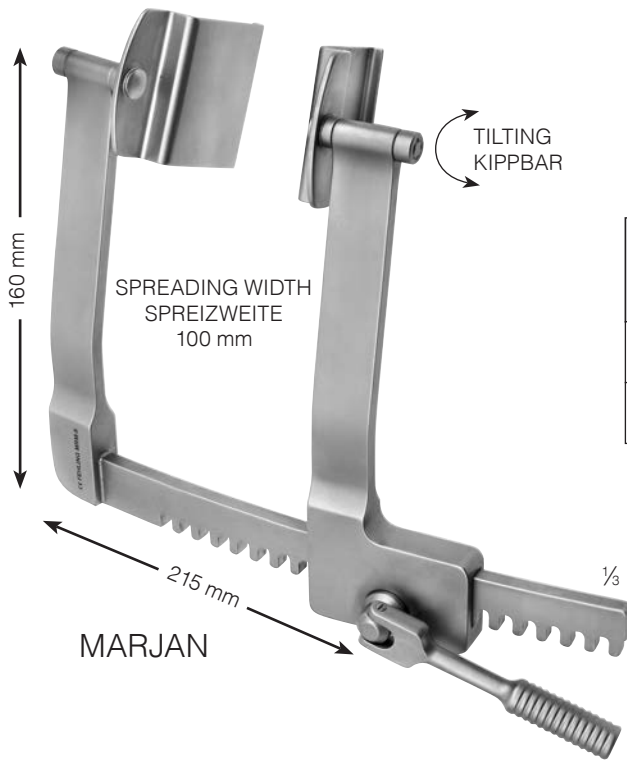
**opening width / Öffnungsweite



exemplary configuration
Beispielkonfiguration
ADULT - ADIPOSIS

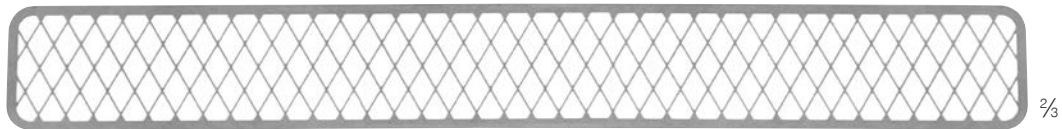


exemplary configuration
Beispielkonfiguration
OSTEOPOROSIS



FOR PARTIAL STERNOTOMY
FÜR PARTIELLE STERNOTOMIE

BLADE SIZE BLATTGRÖSSE a x b	
35 x 50 mm	MRM-5
45 x 50 mm	MRM-6



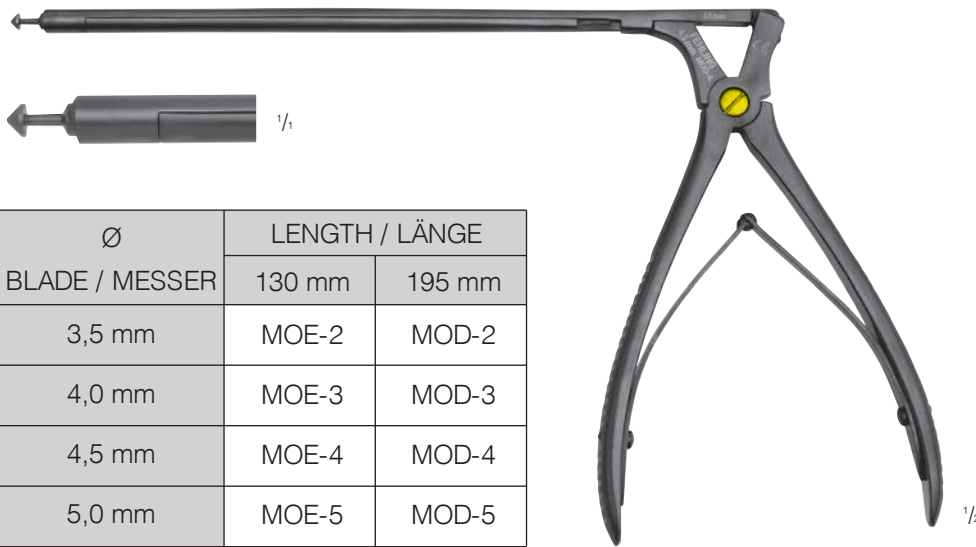
SUPERFLEX
SOFT TISSUE RETRACTOR
WEICHGEWEBERETRAKTOR
200 x 25 mm

MTI-0



STERILISATION AND STORAGE TRAY FOR MTI-0
STERILISIER- UND LAGERSIEB FÜR MTI-0
220 x 51,2 x 19,5 mm

MTK-0



Ø BLADE / MESSER	LENGTH / LÄNGE	
	130 mm	195 mm
3,5 mm	MOE-2	MOD-2
4,0 mm	MOE-3	MOD-3
4,5 mm	MOE-4	MOD-4
5,0 mm	MOE-5	MOD-5

CERAMO®
AORTIC PUNCH
AORTENSTANZE



AORTIC PUNCH
AORTENSTANZE


Ø BLADE / MESSER	LENGTH / LÄNGE	
	120 mm	150 mm
3,0 mm	MKV-1	MKV-2
3,5 mm	MFT-5	MFT-0
4,0 mm	MFT-6	MFT-9
4,5 mm	MFT-1	MMK-2
5,0 mm	MFT-7	MFU-1
6,0 mm	MFT-8	MFU-2



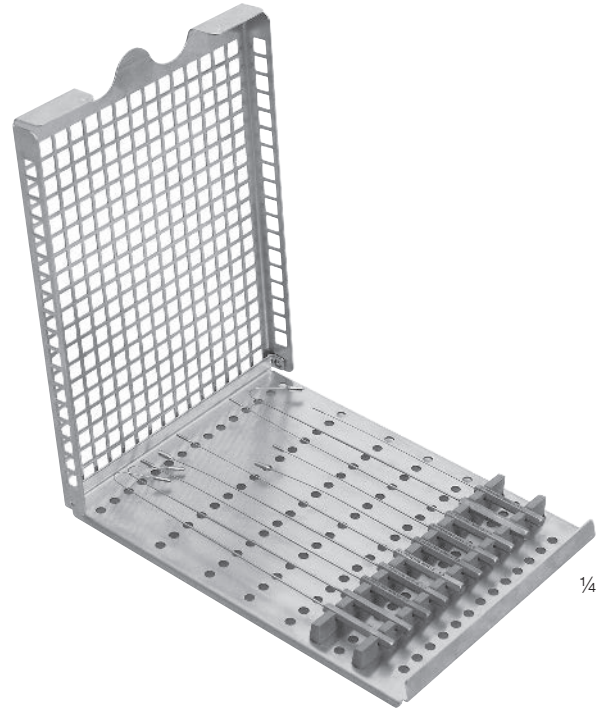
A & E (PORTER)
SINGLE USE AORTIC PUNCH*
EINMAL-AORTENSTANZE*

Ø BLADE / MESSER	
2,7 mm	MOH-1
3,5 mm	MOH-2
4,0 mm	MOH-3
4,5 mm	MOH-4
4,8 mm	MOH-7
5,0 mm	MOH-5

* limited distribution territory
eingeschränktes Vertriebsrecht



SUPERPLAST	LENGTH / LÄNGE		
Ø OLIVE	140 mm	180 mm	210 mm
0,5 mm	MNG-0	MNH-0	-
0,75 mm	-	MNK-7	-
1,0 mm	MNG-1	MNH-1	MIH-1
1,25 mm	MNK-3	MNK-5	-
1,5 mm	MNG-2	MNH-2	MIH-2
1,75 mm	MNK-4	MNK-6	-
2,0 mm	MNG-3	MNH-3	MIH-3
2,25 mm	MNK-8	MNK-9	-
2,5 mm	MNG-4	MNH-4	MIH-4
3,0 mm	MNG-5	MNH-5	MIH-5
3,5 mm	MNG-6	MNH-6	MIH-6
4,0 mm	MNG-7	MNH-7	MIH-7
4,5 mm	MNG-8	MNH-8	MIH-8
5,0 mm	MNG-9	MNH-9	MIH-9



TRAY FOR VASCULAR PROBES
BOX FÜR GEFÄSSSONDEN

OLIVE Ø max. 5 mm
160 x 210 x 17 mm

MNA-0

SUPERPLAST instruments are constructed of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are malleable in normal OR temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperature, such as those found in the autoclave, the instruments regain their initial shape.

SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie bieten verschiedene Eigenschaften je nach thermischen Bedingungen. Sie sind bei normaler OP-Temperatur biegsam und können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.

SUPERFLEX instruments are constructed of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are super-elastic in normal OR temperatures. Their shape conforms to soft external pressure, yet the instruments regain their normal shape once the pressure is removed. No long-term alteration of shape is possible.

SUPERFLEX Instrumente sind aus Metall mit Formgedächtnis. Sie bieten verschiedene Eigenschaften je nach thermischen Bedingungen. Sie sind bei normaler OP-Temperatur superelastisch. Ihre Form folgt jedem von außen kommenden Druck und sie gewinnen ihre ursprüngliche Form wieder, sobald der Druck entfällt. Ergebnis: Es wird keine bleibende Verformung verursacht.

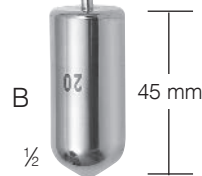
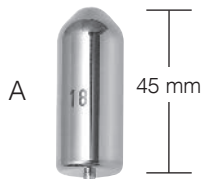


SUPERFLEX	LENGTH / LÄNGE	
Ø OLIVE	140 mm	180 mm
1,0 mm	MNA-1	MNC-1
1,5 mm	MNA-2	MNC-2
2,0 mm	MNA-3	MNC-3
2,5 mm	MNA-4	MNC-4
3,0 mm	MNA-5	MNC-5



SUPERFLEX	LENGTH / LÄNGE	
Ø OLIVE	140 mm	180 mm
1,0 mm	MNB-1	MND-1
1,5 mm	MNB-2	MND-2
2,0 mm	MNB-3	MND-3
2,5 mm	MNB-4	MND-4
3,0 mm	MNB-5	MND-5

SUPERPLAST



AORTIC SIZER
AORTENLEHRE
300 mm

SUPERPLAST instruments are constructed of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are malleable in normal OR temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperature, such as those found in the autoclave, the instruments regain their initial shape.

SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie bieten verschiedene Eigenschaften je nach thermischen Bedingungen. Sie sind bei normaler OP-Temperatur biegsam und können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.



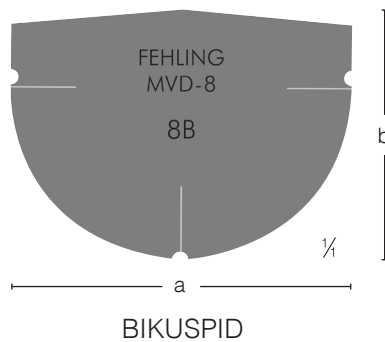
for mitral valve repair techniques
without prosthetic ring
für Mitralklappenrekonstruktion
ohne Ringprothese

HETZER
CROSS-SECTION SIZER
QUERSCHNITTSLEHRE
220 mm

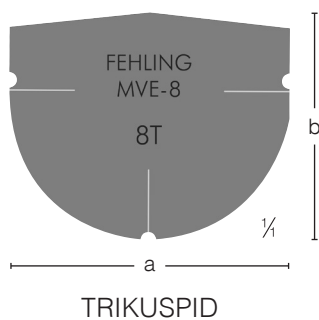
Ø A / B	
14 / 16 mm	MNW-7
18 / 20 mm	MNW-1
22 / 24 mm	MNW-2
26 / 28 mm	MNW-3
30 / 32 mm	MNW-4
34 / 36 mm	MNW-5
38 / 40 mm	MNW-6

Ø A / B	
7 / 9 mm	MNZ-0
8 / 10 mm	MNZ-6
11 / 13 mm	MNZ-7
12 / 14 mm	MNZ-2
15 / 17 mm	MNZ-8
16 / 18 mm	MNZ-3
19 / 21 mm	MNZ-9
20 / 22 mm	MNZ-4
24 / 26 mm	MNZ-5
28 / 30 mm	MNY-9

SUPERPLAST AV-CUSP GAUGE
AK-SEGELIMPLANTAT-LEHRE



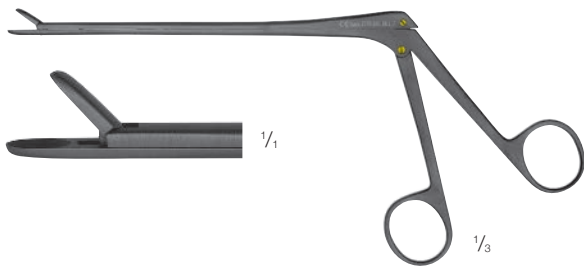
SIZE GRÖSSE	WIDTH x HEIGHT BREITE x HÖHE a x b	
1B	25 x 20 mm	MVD-1
2B	28 x 22 mm	MVD-2
3B	31 x 24 mm	MVD-3
4B	34 x 26 mm	MVD-4
5B	37 x 28 mm	MVD-5
6B	40 x 30 mm	MVD-6
7B	43 x 32 mm	MVD-7
8B	46 x 34 mm	MVD-8
9B	49 x 36 mm	MVD-9



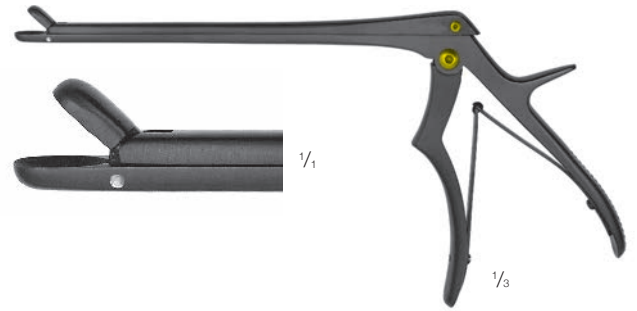
SIZE GRÖSSE	WIDTH x HEIGHT BREITE x HÖHE a x b	
0T	18 x 18 mm	MVE-0
1T	19 x 20 mm	MVE-1
2T	22 x 22 mm	MVE-2
3T	25 x 24 mm	MVE-3
4T	28 x 26 mm	MVE-4
5T	31 x 28 mm	MVE-5
6T	34 x 30 mm	MVE-6
7T	37 x 32 mm	MVE-7
8T	40 x 34 mm	MVE-8
9T	43 x 36 mm	MVE-9

SUPERPLAST instruments are constructed of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are malleable in normal OR temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperature, such as those found in the autoclave, the instruments regain their initial shape.

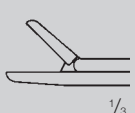
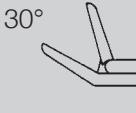
SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie bieten bestimmte Eigenschaften entsprechend den thermischen Bedingungen. Sie sind bei normaler OP-Temperatur biegsam und können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.

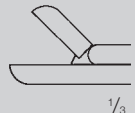
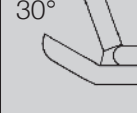


CERAMO® GRUMME
RONGEUR



CERAMO® FERRIS-SMITH
RONGEUR

WIDTH BREITE mm	LENGTH LÄNGE mm	 $\frac{1}{3}$	30°  $\frac{1}{3}$
2,0	160	NLT-2	NLT-6
	180	NLU-2	NLU-6
3,0	160	NLT-3	NLT-7
	180	NLU-3	NLU-7
4,0	160	NLT-4	NLT-8
	180	NLU-4	NLU-8
5,0	160	NLT-5	NLZ-9
	180	NLU-5	NLU-9

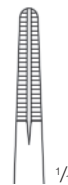
WIDTH BREITE mm	LENGTH LÄNGE mm	 $\frac{1}{3}$	30°  $\frac{1}{3}$
3,0	200	TOG-1	TOH-1
4,0	200	TOG-2	TOH-2
5,0	200	TOG-3	TOH-3



COMB CLAMP
KAMMKLEMMME
160 mm
DDA-2



NON-TRAUMATIC
VALVE FORCEPS
ATRAUMATISCHE
KLAPPENPINZETTE



LENGTH LÄNGE	2,5 mm
200 mm	CDP-5
230 mm	CDP-2
250 mm	CDP-3



RETRACTOR FOR AV-EXPOSURE
RETRAKTOR FÜR AK-EXPOSITION
180 mm
MSB-0



TC WIRE TWISTING FORCEPS, STRONG
TC DRAHTSPANNZANGE, STARK
180 mm
KAJ-5



TC WIRE CUTTING FORCEPS
TC DRAHTKNEIFZANGE
175 mm
LAF-1








STERNUMWIRE CUTTER
STERNUMDRAHTZANGE
155 mm
LGJ-5

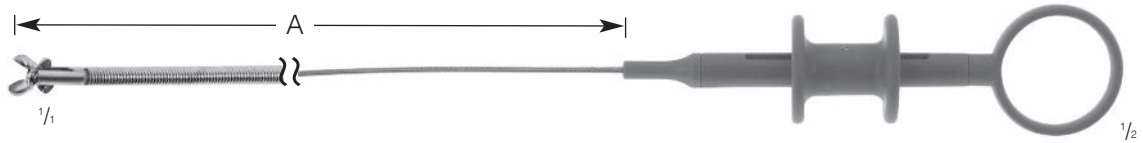


AORTIC DEAIRING CANNULA
AORTEN-ENTLÜFTUNGSKANÜLE
MBR-2



SUTURE HOOK
FADENFÄNGER

	 1/4 1,2 mm	 1/4 1,5 mm	 1/4 2,0 mm	 1/4 2,5 mm	 1/4 3,0 mm
120 mm	—	KAJ-5	—	—	—
150 mm	—	KCC-1	—	—	—
200 mm	KAB-0	—	—	—	—
220 mm	—	—	—	KCB-8	—
260 mm	KAJ-4	KAJ-6	KAJ-7	KCA-7	KAJ-8
280 mm	—	—	—	KCB-9	—

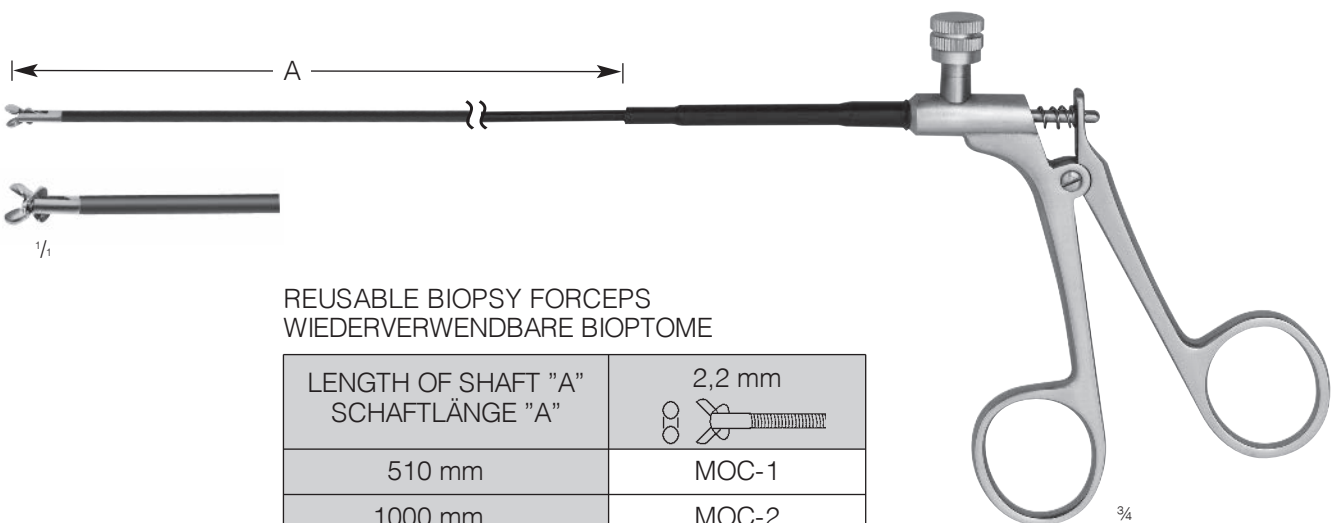


STERILE SINGLE USE BIOPSY FORCEPS
STERILE EINMALBIOPTOME

LENGTH OF SHAFT "A" SCHAFTLÄNGE "A"	1,6 mm	1,8 mm	2,2 mm
510 mm	MOA-1	MOA-5	MOA-9
800 mm	MOA-2	MOA-6	-
1000 mm	MOA-3	MOA-7	-
1200 mm	MOA-4	MOA-8	MOB-1

SOFT SHAFT
WEICHER SCHAFT

510 mm	-	MOB-4	-
1200 mm	-	MOB-5	-



REUSABLE BIOPSY FORCEPS
WIEDERVERWENDBARE BIOPTOME

LENGTH OF SHAFT "A" SCHAFTLÄNGE "A"	2,2 mm
510 mm	MOC-1
1000 mm	MOC-2
1200 mm	MOC-3



CHORDAE
GAUGE AND KNOT ASSISTANT
CHORDAE
LEHRE UND KNOTENASSISTENT

230 mm	350 mm
MNV-4	MNV-7



CHORDAE
TYING AND MEASUREMENT ASSISTANT
CHORDAE
MESS- UND KNOTENASSISTENT

240 mm
MNV-1



CHORDAE / CUSP
RETRACTOR, FLAT
CHORDAE- /
SEGELRETRAKTOR, FLACH

240 mm	350 mm
MNV-6	MNV-8



TROCAR WITH PYRAMIDAL TIP
TROKAR MIT DREIKANTSPITZE
10 x 180 mm

MRM-7



PORT WITH FIXATION THREAD
PORT MIT FIXIERGEWINDE
10 x 100 mm

MRM-9



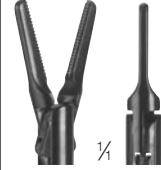

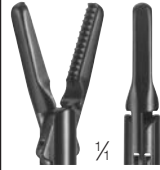

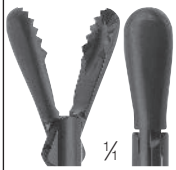


PORT, PLANE
PORT, GLATT
10 x 100 mm

MRM-8




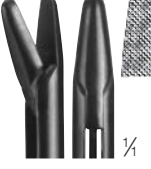

CERAMO® HCR

FORCEPS / PINZETTEN

 1 x 10 mm	 3 x 15 mm	 1,5 x 11 mm	 1,5 x 11 mm	 2,8 x 15 mm	 2,8 x 15 mm	 350 mm		
SUTURE NAHT	VALVE KLAPPE	NON-TRAUMATIC ATRAUMATISCH					RUSSIAN RUSSISCH	
345 mm	350 mm	280 mm	350 mm	350 mm	280 mm	350 mm	350 mm	
MRA-5	MRA-0 MRQ-3 ¹⁾	MSO-6	MRG-6	MRG-7	MRN-0 MRN-OB ¹⁾	MRA-3 MRA-3B ¹⁾	MRA-4	MRQ-5












1) WITH LOCK
MIT SPERRE

NEEDLE HOLDERS / NADELHALTER (WITH LOCK / MIT SPERRE)

 2 x 10 mm max. 5x0	 3 x 10 mm max. 3x0	 3 x 10 mm max. 2x0	 3 x 10 mm max. 2x0	 1,5 mm max. 5x0			
TCM		TC		TC RYDER			
340 mm	280 mm	340 mm	280 mm	340 mm	280 mm	350 mm	350 mm
MRB-2	MRG-8	MRB-1	MRT-6	MRG-9	MSO-5	MRG-2	MSO-1

max. suture size
max. Fadenstärke


SCISSORS / SCHEREN


						
VALVE KLAPPE						
350 mm	350 mm	350 mm	280 mm	350 mm	450 mm	350 mm
MRA-7	MRT-2	MRT-3	MSO-3	MRD-7	MRD-7L	MSO-4
						
45°	45°	90°				
BLUNT/STUMPF						
VASCULAR GEFÄSS			DISSECTING PRÄPARATION			
345 mm	345 mm	335 mm	280 mm	350 mm		
MRA-8B	MRA-8	MRA-9	MRQ-0	MRA-6		


SHAFT DIAMETER = 5.0 mm
SCHAFTDURCHMESSER = 5,0 mm





CERAMO® HCR





	
5 x 30 mm	
NON-TRAUMATIC GRASPING FORCEPS ATRAUMATISCHE ORGANFASSZANGE	
370 mm	
MRL-8 MRL-8L ¹⁾	

	
25°	
KNOT PUSHER KNOTENSCHIEBER	
280 mm	340 mm
MRQ-2	MRB-6 MRB-6B ¹⁾


NO CERAMO® KEIN CERAMO®	
	
CLIP APPLIER ²⁾ CLIPANLEGEZANGE	
370 mm	370 mm
SMALL	MEDIUM
MRG-3T	MRG-4T





	
1 x 7 mm	
NERV HOOK NERVHAKEN	
280 mm	340 mm
MRQ-1	MRB-4

	
10 mm	
VALVE INSPECTOR KLAPPENPRÜFINSTR.	
350 mm	
MRL-2	

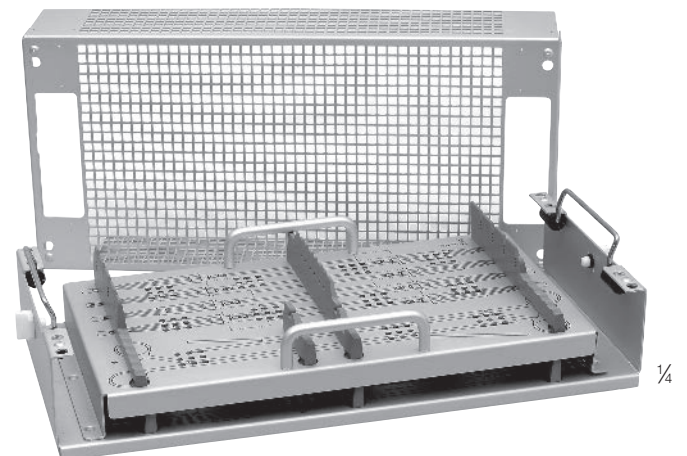

SCALPEL HANDLE ³⁾ SKALPELLGRIFF
350 mm
MRL-4


PEEK
KNOT PUSHER KNOTENSCHIEBER
340 mm
MRK-9P


MAGNETIC FINDER MAGNETSTAB
350 mm
MRL-5


MIRROR SPIEGEL
360 mm
MRQ-6

3) FOR BEAVER BLADES
FÜR BEAVER MESSER



TRAY FOR HCR INSTRUMENTS
CONTAINER FÜR HCR-INSTRUMENTE
550 x 250 x 100 mm





MRC-9

1) WITH LOCK
MIT SPERRE



2) FOR / FÜR
ETHICON + HORIZON CLIPS

CERAMO® HCR

FORCEPS / PINZETTEN





 1,2 x 8 mm	 1,2 x 15 mm	 1,2 x 12 mm 45°	 1,4 x 12 mm 45°
SUTURE NAHT	NON-TRAUMATIC ATRAUMATISCH		
280 mm	290 mm	280 mm	280 mm
MRC-1	MRC-2	MRC-3	MRC-0

TCM NEEDLE HOLDERS / TCM NADELHALTER

 1 x 10 mm max. 6x0	 2 x 10 mm max. 5x0
280 mm	280 mm
MRC-5	MRC-4

max. suture size
max. Fadenstärke

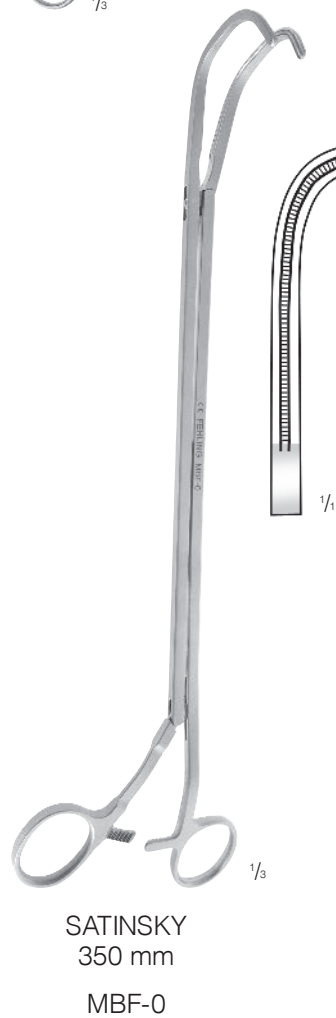
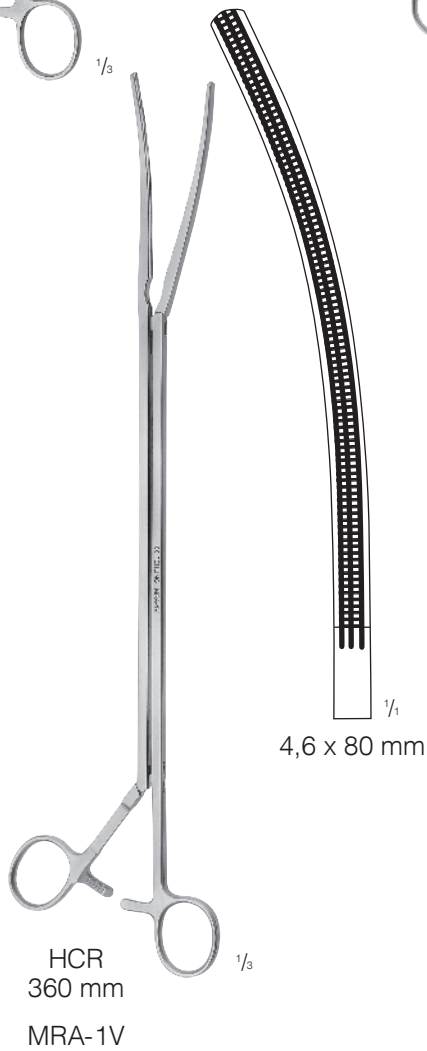
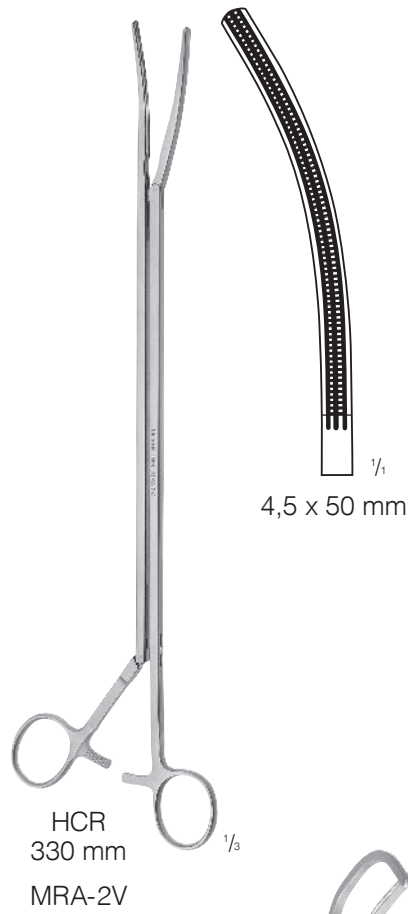
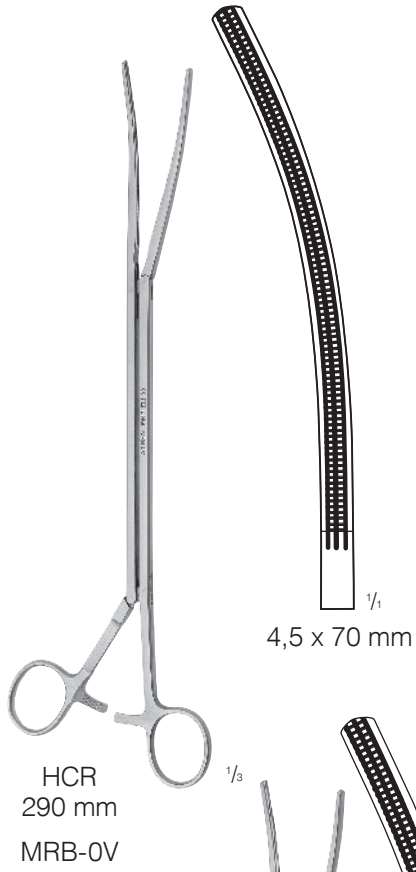
SCHEREN / SCISSORS

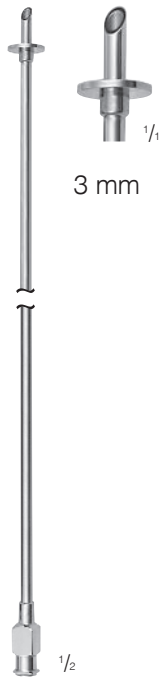
 45°	 125°	 45° 7 mm	
VASCULAR GEFÄSS			DISSECTING PRÄPARATION
280 mm	280 mm	280 mm	280 mm
MRC-7	MRC-8	MRM-0	MRC-6

SHAFT DIAMETER = 3.5 mm
SCHAFTDURCHMESSER = 3,5 mm

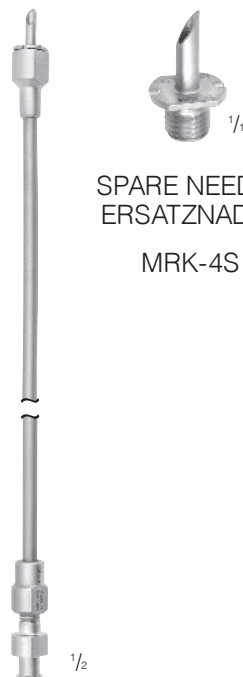


NON-TRAUMATIC FORCEPS
ATRAUMATISCHE KLEMMEN





CARDIOPLEGIA CANNULA
KARDIOPLEGIEKANÜLE
270 mm
MRL-0



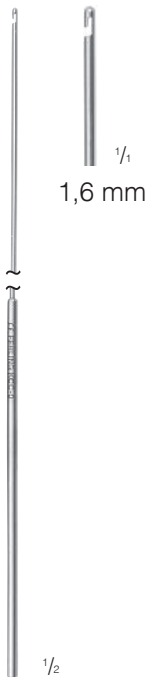
SPARE NEEDLE
ERSATZNADEL
MRK-4S

CARDIOPLEGIA CANNULA*
KARDIOPLEGIEKANÜLE*
270 mm
MRK-4

* detachable LL-Adapter
* LL-Anschluss abnehmbar



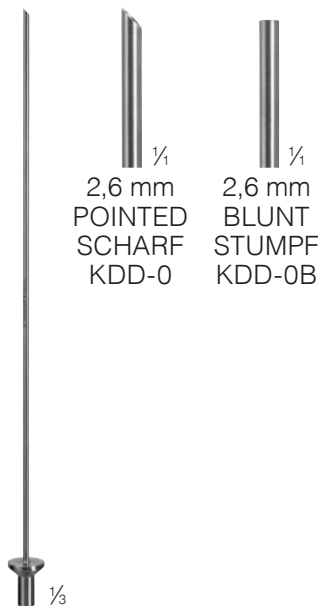
WRENCH FOR
DETACHABLE LL-ADAPTER
SCHLÜSSEL FÜR
ABNEHMBAREN LL-ANSCHLUSS
MRK-6



SUTURE HOOK
FADENFÄNGER
350 mm
KCC-0



CERAMO®
HANDLE FOR KCC-0
GRIFF FÜR KCC-0
110 mm
ABB-1



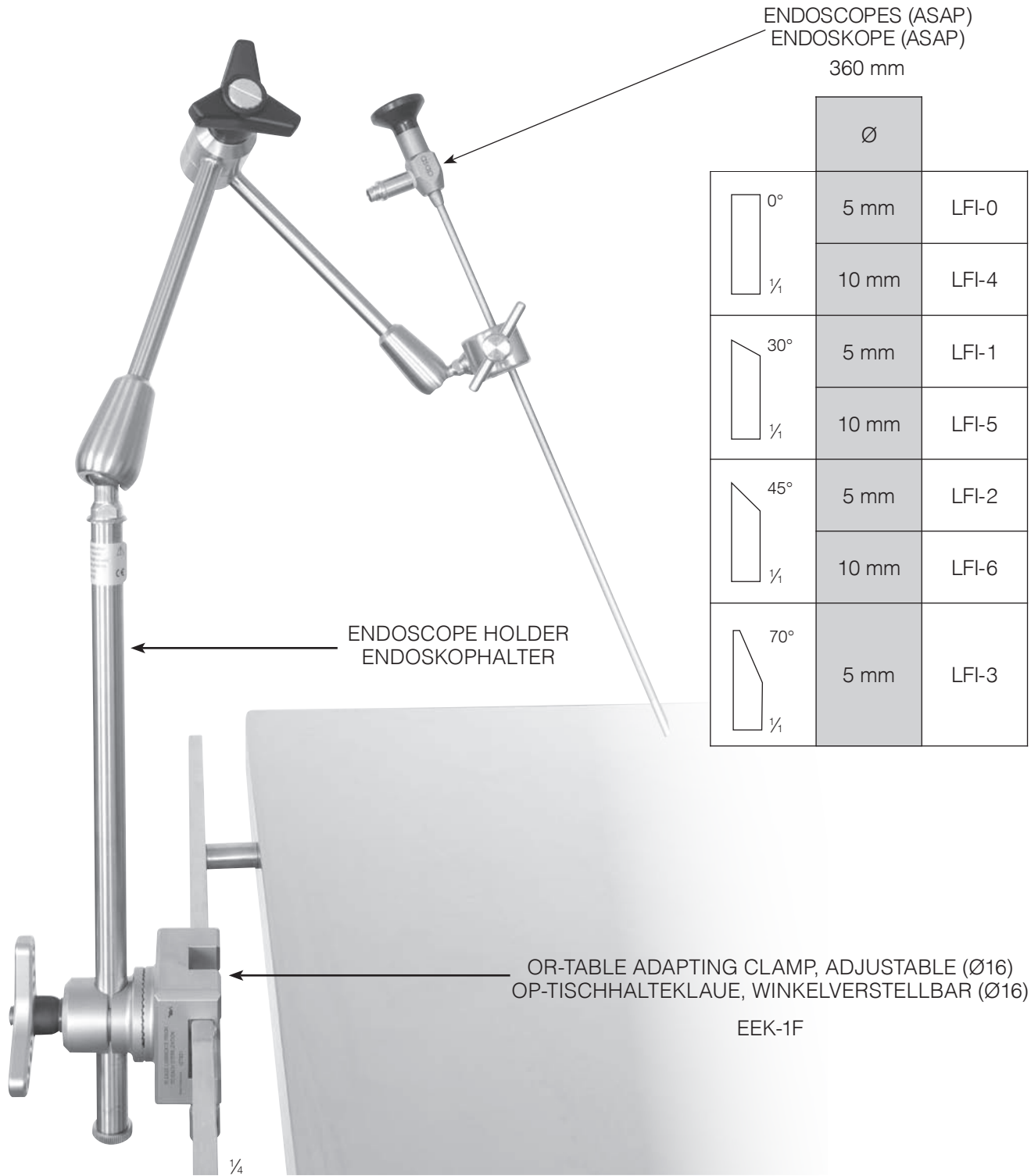
TROCAR SLEEVE
FOR KCC-0
TROKARHÜLSE
FÜR KCC-0
240 mm




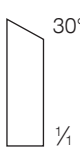
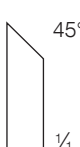

SUMP ASPIRATOR*
SUMPFSAUGER*
270 mm
MRK-5

* detachable LL-Adapter
* LL-Anschluss abnehmbar

CONCEPT MICS ENDOSCOPE HOLDING SYSTEM
MICS ENDOSKOPHALTESYSTEM



ENDOSCOPES (ASAP)
ENDOSKOPE (ASAP)
360 mm

	∅	
 0° 1/4	5 mm	LFI-0
	10 mm	LFI-4
 30° 1/4	5 mm	LFI-1
	10 mm	LFI-5
 45° 1/4	5 mm	LFI-2
	10 mm	LFI-6
 70° 1/4	5 mm	LFI-3

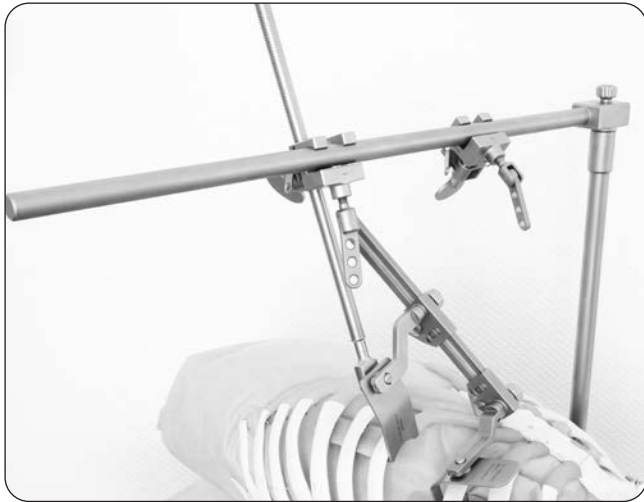
ENDOSCOPE HOLDER
ENDOSKOPHALTER

OR-TABLE ADAPTING CLAMP, ADJUSTABLE (∅16)
OP-TISCHHALTEKLAUE, WINKELVERSTELLBAR (∅16)

EEK-1F

INSTRUMENT ATTACHMENT
INSTRUMENTEN-HALTERUNG
WITHOUT SOCKET/OHNE SOCKEL
843 mm
EEP-7

appropriate for instruments with round profile
geeignet für Instrumente mit rundem Profil
(∅ 4 - 18 mm)



*exemplary configuration
Beispielkonfiguration*



COUPLING RIDER
VERBINDUNGSSCHLITTEN
EEP-0

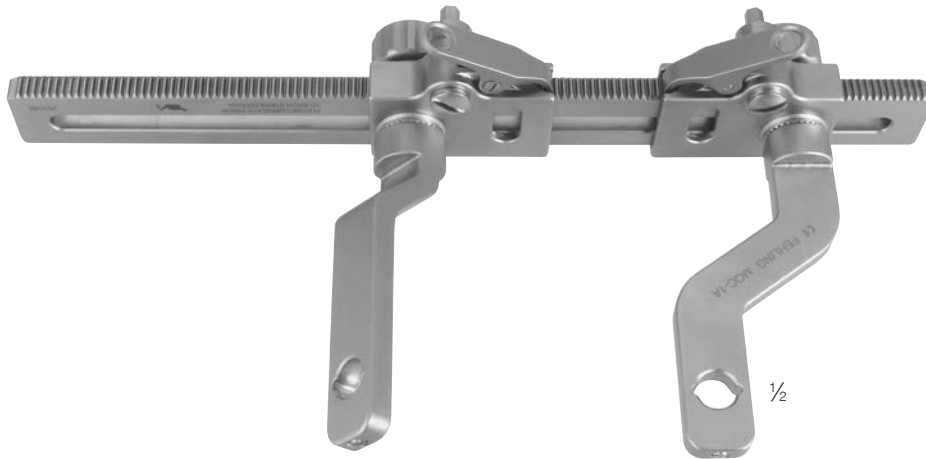


OR-TABLE ADAPTING CLAMP
ANGLE ADJUSTABLE (16 x 16 mm)
OP-TISCH HALTEKLAUE
WINKELVERSTELLBAR (16 x 16 mm)
EEJ-1



BLADE GUIDE
HAKENFÜHRUNG
300 mm
EEL-4F

ANGULATED ROD
WINKELSTAB
16 x 16 x 1000 x 600 mm
EEJ-2 (a,b,c)



IMA RETRACTOR, COMPLETE WITH TWO ROTATABLE ARMS
IMA SPREIZER, KOMPLETT MIT ZWEI DREHBAREN ARMEN

MQC-11

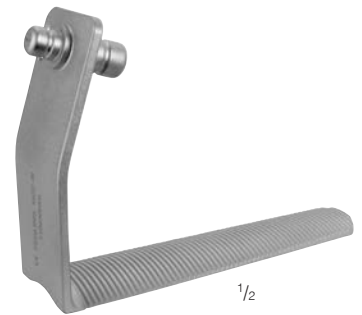
(consisting of / bestehend aus: MQC-1, MQC-1A, MQC-1B)



IMA COUNTERBLADE
IMA GEGENBLATT



XIPHOID BLADE
XIHPOID BLATT



IMA BLADE
IMA BLATT

BLADE SIZE BLATTGRÖßE	
40 x 35 x 60 mm	MQF-1
50 x 35 x 60 mm	MQF-2

BLADE SIZE BLATTGRÖßE	
40 x 30 x 20 mm	MQE-3I
40 x 45 x 20 mm	MQE-2I
40 x 60 x 20 mm	MQE-1I

BLADE SIZE BLATTGRÖßE	
70 x 30 mm	MQC-6I
90 x 30 mm	MQC-7I
110 x 30 mm	MQC-8I
130 x 30 mm	MQC-9I
70 x 40 mm	MQC-2I
90 x 40 mm	MQC-3I
110 x 40 mm	MQC-4I



CARDAN SCREWDRIVER
KARDAN SCHRAUBENDREHER

LMT-4



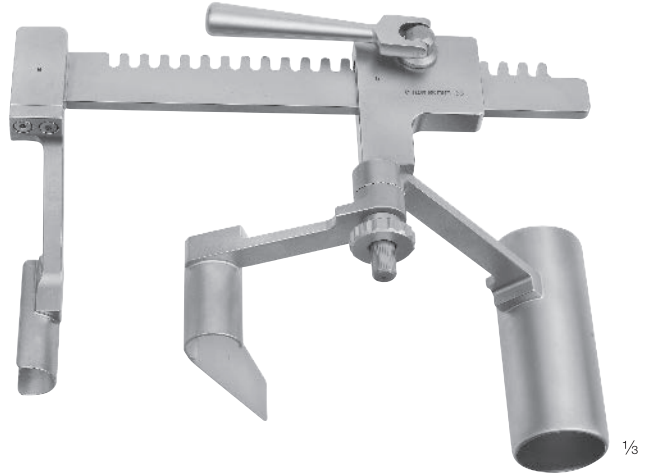
CERAMO®
HEXAGONAL WRENCH
SECHSKANTSCHLÜSSEL

NVG-9

CTS



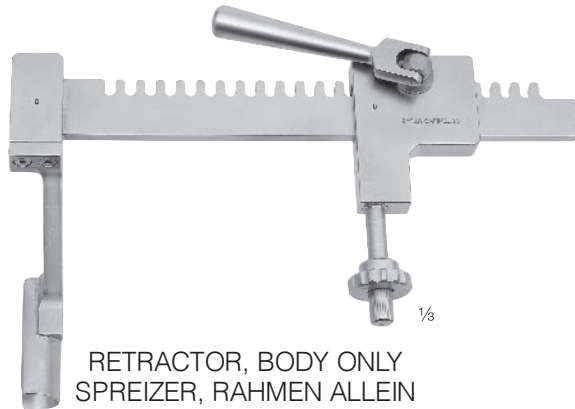
exemplary configuration
Konfigurationsbeispiel



MICS IMA RETRACTOR, COMPLETE
MICS IMA-SPREIZER, KOMPLETT

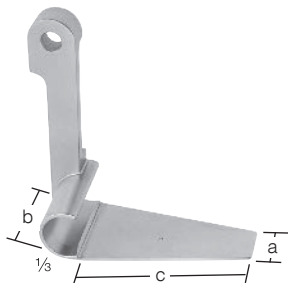
MTU-3

COMPONENTS INCLUDED IN MTU-3:
IN MTU-3 ENTHALTENE BESTANDTEILE:



RETRACTOR, BODY ONLY
SPREIZER, RAHMEN ALLEIN

MTU-3(a)



IMA-BLADE
IMA BLATT

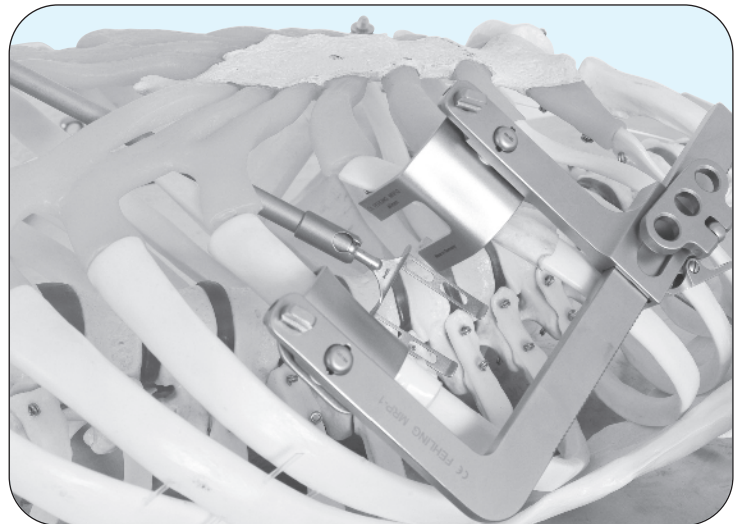
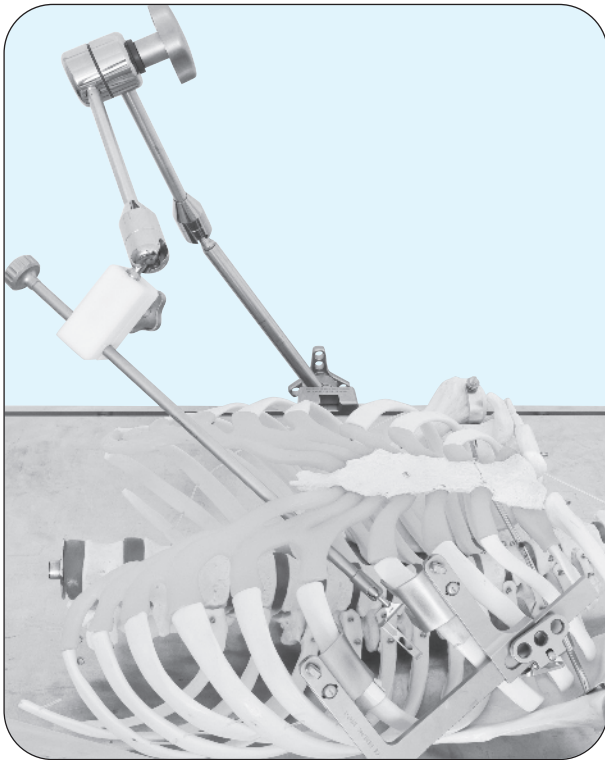
a x b x c	
18 x 40 x 72 mm	MTU-3(f1)
20 x 45 x 80 mm	MTU-3(f2)
22 x 50 x 88 mm	MTU-3(f3)



LEVER ARM
HEBELARM

a	
70 mm	MTU-3(g1)
100 mm	MTU-3(g2)

MYOCARDIAL MUSCLE STABILIZER
HERZMUSKELSTABILISATOR



exemplary configuration
Konfigurationsbeispiel



BLADE GUIDE (Ø8)
HAKENFÜHRUNG (Ø8)
300 mm

MTI-1



GUIDING PROBE
FÜHRUNGSSONDE

MTI-2V



MYOCARDIAL MUSCLE STABILIZER 90°
HERZMUSKELSTABILISATOR 90°

MRJ-9V

REQUIRED ACCESSORY FOR
TABLE-FIXATION (see page 11/17)

ERFORDERLICHES ZUBEHÖR
FÜR TISCHFIXIERUNG (siehe Seite 11/17)

CONCEPT INSTRUMENT ATTACHMENT
CONCEPT INSTRUMENTEN-HALTERUNG

EEP-7

OR-TABLE ADAPTING CLAMP
OP-TISCHHALTEKLAUE

EEK-1F

SCHÄFERS



CALLIPER FOR
AORTIC VALVE CUSP
LEHRE FÜR
AORTENKLAPPENSEGEL
200 mm



LARGE
GROSS
MSS-1V



MEDIUM
MITTEL
MSS-3



SMALL
KLEIN
MSS-2V



LOCK NUT FOR MSS-*
KONTERMUTTER FÜR MSS-*
ZDS-6

optional – for fixation of the measuring
optional – zur Fixierung der Messung

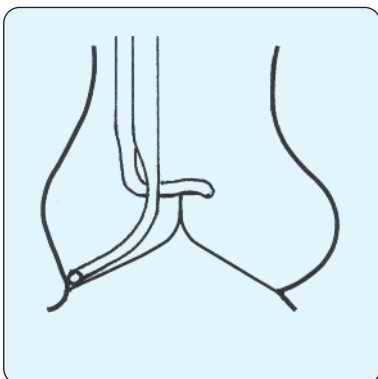


RULER
MESSSTAB
160 mm
MNV-0

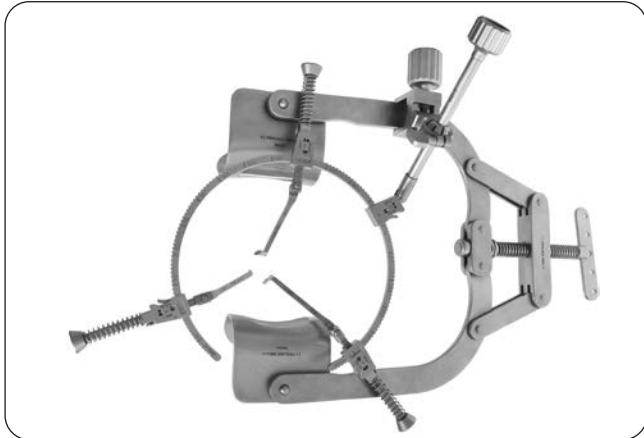


SUPERPLAST
CROSS-SECTION SIZER
QUERSCHNITTSLEHRE
220 mm

Ø A / B	
18 / 20 mm	MNX-1
19 / 21 mm	MNX-6
22 / 24 mm	MNX-2
23 / 25 mm	MNX-7
26 / 28 mm	MNX-3
27 / 29 mm	MNX-8
30 / 32 mm	MNX-4
31 / 33 mm	MNX-9
34 / 36 mm	MNX-5
17 / 35 mm	MNX-0



SCHÄFERS



*exemplary configuration
Konfigurationsbeispiel*



**AVR RETRACTOR / BODY ONLY
AKR-SPREIZER / RAHMEN ALLEIN**
Ø 140 mm

MRW-1G



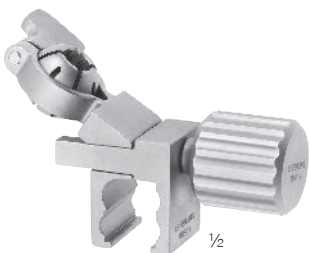
**COUPLING RIDER FOR RETRACTING BLADES
FIXIERSCHLITTEN FÜR HALTEBLÄTTER**

MRW-7



**COUPLING RIDER WITH
CONNECTION BALL
KONNEKTORSCHLITTEN**

MRW-6



**BALL JOINT ADAPTER (Ø8)
KUGELADAPTER (Ø8)**

MRF-1V

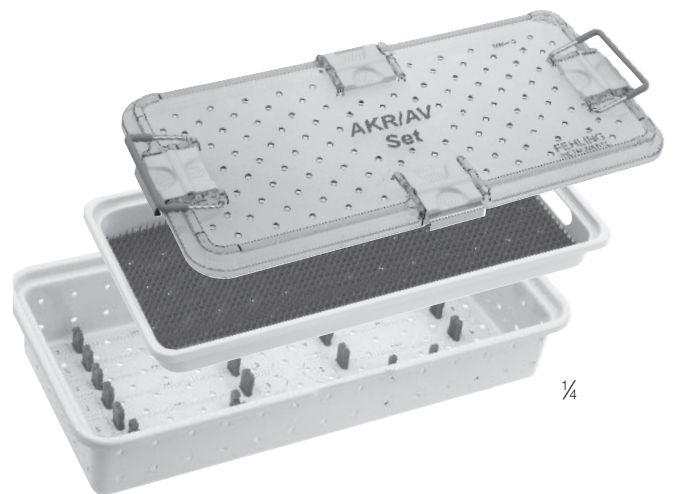


**BLADE GUIDE (Ø8)
HAKENFÜHRUNG (Ø8)**
120 mm

MRI-0

**RETRACTING BLADES
HALTEBLÄTTER**

BLADE DEPTH BLATTTIEFE	
70 mm	MRW-2G
85 mm	MRW-3G
100 mm	MRW-4G
115 mm	MRW-5G






**AVR STERILISATION AND STORAGE TRAY
AKR STERILISIER- UND LAGERCONTAINER**
530 x 250 x 100 mm

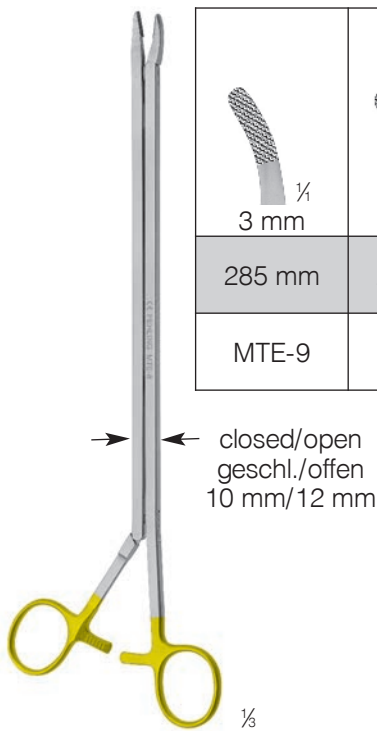
MRW-0

MITHOS




INSTRUMENTS FOR MINIMALLY INVASIVE THORACIC SURGERY
INSTRUMENTE FÜR MINIMALINVASIVE THORAXCHIRURGIE

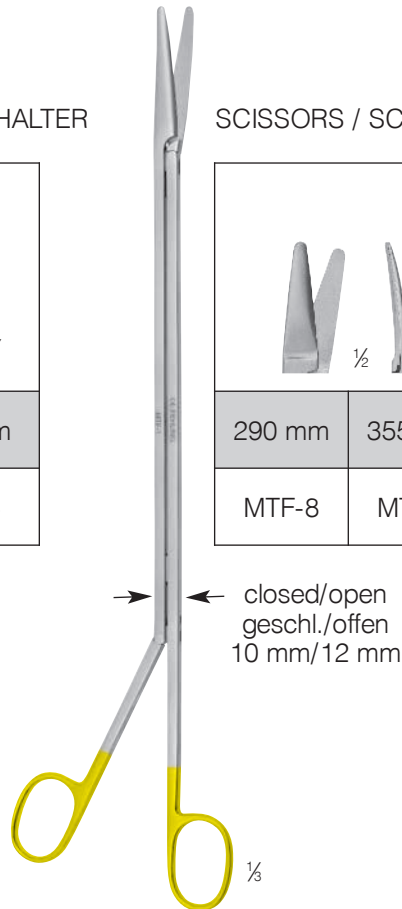
TC NEEDLEHOLDERS / TC NADELHALTER

		
3 mm $\frac{1}{4}$	4 mm $\frac{1}{4}$	4 mm $\frac{1}{4}$
285 mm	285 mm	340 mm
MTE-9	MTE-8	MTF-5





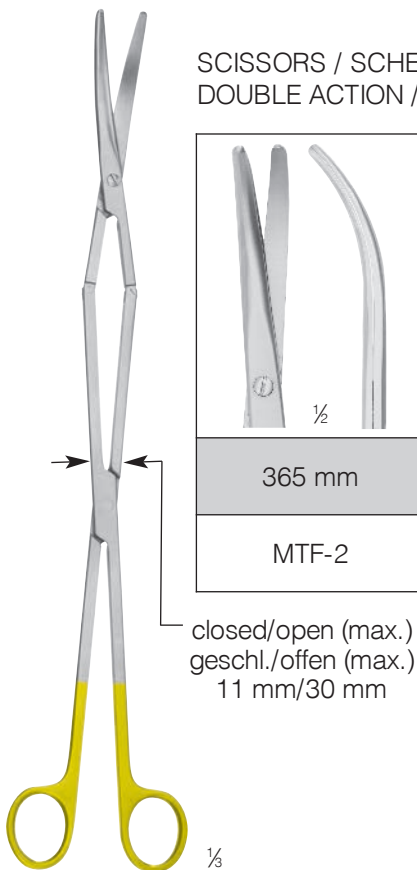
SCISSORS / SCHEREN

		
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
290 mm	355 mm	360 mm
MTF-8	MTF-7	MTF-1




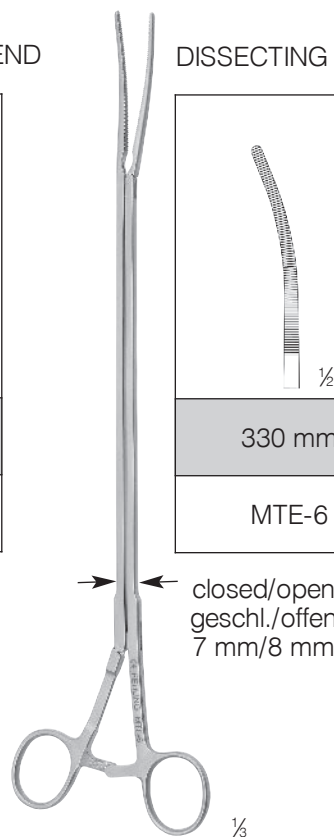
SCISSORS / SCHEREN
DOUBLE ACTION / BEIDSEITIG ÖFFNEND

	
$\frac{1}{2}$	$\frac{1}{2}$
365 mm	360 mm
MTF-2	MTF-6



DISSECTING CLAMP / DISSEKTIONSKLEMME



$\frac{1}{2}$
330 mm
MTE-6

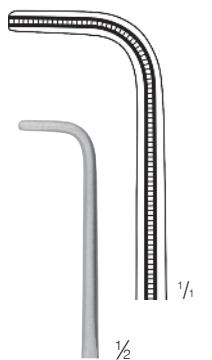
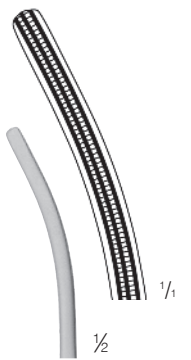
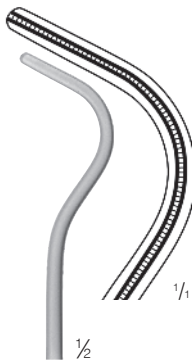
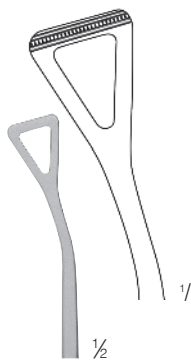
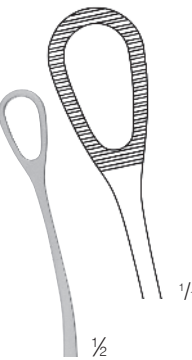


MITHOS

INSTRUMENTS FOR MINIMALLY INVASIVE THORACIC SURGERY
INSTRUMENTE FÜR MINIMALINVASIVE THORAXCHIRURGIE

FORCEPS / KLEMMEN




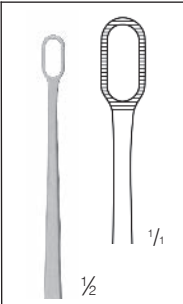
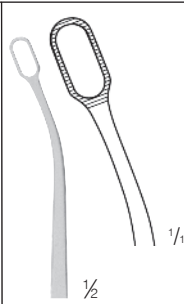
				
1/2	1/2	1/2	1/2	1/2
330 mm	330 mm	350 mm	340 mm	350 mm
WITHOUT LOCK OHNE SPERRE	WITH LOCK MIT SPERRE	WITHOUT LOCK OHNE SPERRE	WITH LOCK MIT SPERRE	WITH LOCK MIT SPERRE
MTE-7	MRA-2V	MTF-3	MTE-1	MTE-2

NON-TRAUMATIC / ATRAUMATISCH GRASPING FORCEPS
FASSZANGE LUNG GRASPING FORCEPS
LUNGENFASSZANGE

closed/open
geschl./offen
10 mm/12 mm

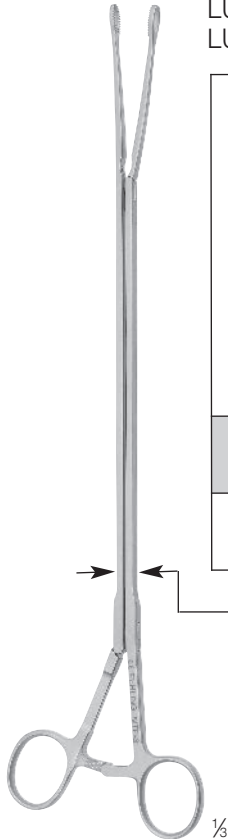
GRASPING FORCEPS / FASSZANGEN

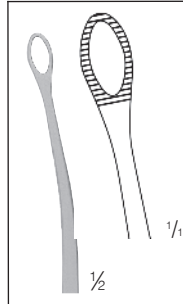


	
1/2	1/2
11 mm	11 mm
340 mm	340 mm
MTE-4	MTE-5

closed/open
geschl./offen
5 mm/6 mm

LUNG GRASPING FORCEPS /
LUNGENFASSZANGE







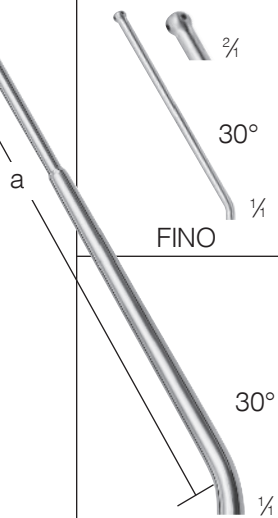



1/2
12 mm
350 mm
MTE-3

closed/open
geschl./offen
7 mm/8 mm

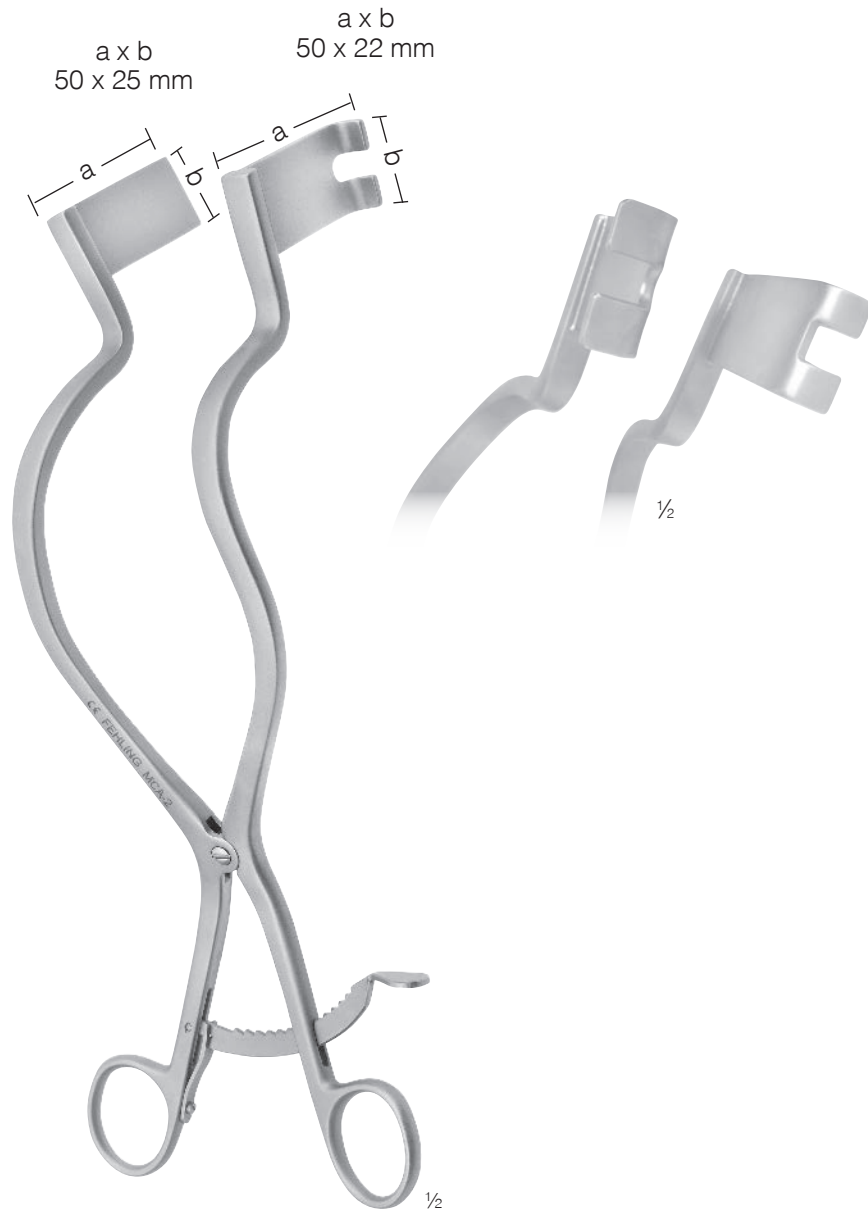
JAMIESON

DISSECTION CANNULAS
DISSEKTIONSSAUGER

		Ø HOLE / BALL LOCH / KUGEL	LENGTH LÄNGE	
	 ¼	0,5 mm	270 mm	MMT-1
		1,0 mm	210 mm	MNF-0
		1,5 mm	270 mm	MMA-7
	 60° ¼	1,0 mm	260 mm	MMC-0
	 [-10 mm -] 90° ¼	1,5 mm	270 mm	MME-5
	 ¼ FINO	1,5 mm	290 mm	MME-1
	 ¼ 30° FINO	1,5 mm	290 mm	MME-2
	 ¼ 30° a	0,5 mm	a = 70 mm 270 mm	MMJ-0
		1,0 mm	a = 60 mm 270 mm	MMJ-6
		1,0 mm	a = 70 mm 270 mm	MMB-0

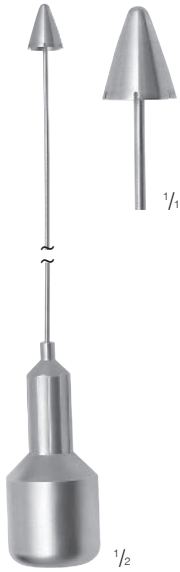
MAYER

PEA RETRACTOR
PEA SPREIZER



260 mm

MCA-2






SUPERPLAST
PETZOLD
250 mm

STRIPPER FOR VARICOSE VEINS
VARIZENSTRIPPER

Ø	
2 mm	MIE-7
3 mm	MIE-8
4 mm	MIE-1
5 mm	MIE-2
6 mm	MIE-3
7 mm	MIE-4
8 mm	MIE-5
10 mm	MIE-6



SUPERPLAST
OCCLUDER
80 mm

1,0 mm	1,5 mm	2,5 mm
		
2,5 mm	2,0 mm	3,0 mm
MNK-0	MNK-1	MNK-2



SUPERFLEX
500 mm

INSTRUMENTS FOR THROMBECTOMY
INSTRUMENTE FÜR THROMBEKTOMIE



Ø	RING STRIPPER* RINGSTRIPPER*	SPIRAL CURETTE** SPIRALKÜRETTE**
3 mm	MIG-3	-
4 mm	MIG-4	-
5 mm	MIG-5	MID-1
6 mm	MIG-6	MID-2
7 mm	MIG-7	MID-3
8 mm	MIG-8	MID-4
9 mm	MIG-2	MID-5
10 mm	MIG-9	MID-6
12 mm	MIG-0	-
14 mm	MIG-1	-

* FOR NATIVE VESSELS / FÜR NATÜRLICHE GEFÄSSE
** FOR PROSTHESES / FÜR PROTHESEN



CERAMO®
HANDLE
GRIFF
105 mm
ABB-5

FEHLING...

... THE DIFFERENCE

PC

SET FOR PEDIATRIC
CARDIAC SURGERY

SET FÜR KINDER-
HERZCHIRURGIE



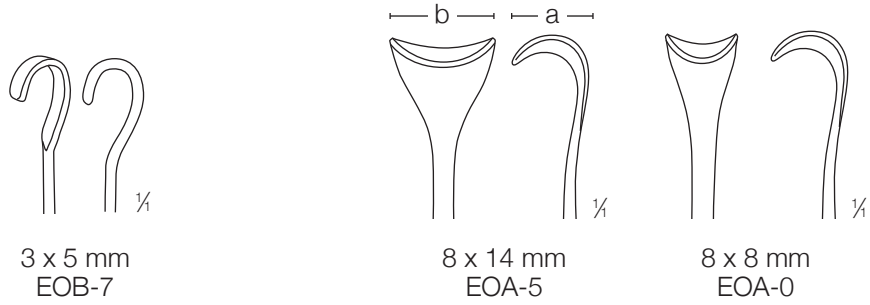
FEHLING
INSTRUMENTS

Hanauer Landstraße 7A · 63791 Karlstein/Germany · www.fehling-instruments.de

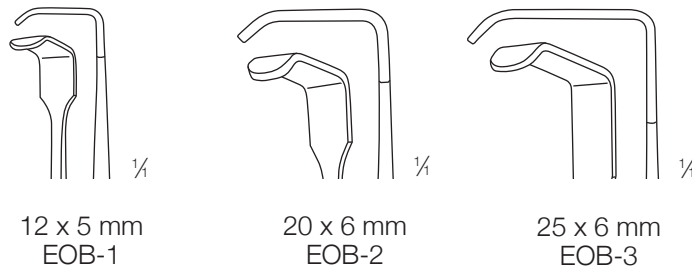
 +49(0) 6188 - 95 74.40  +49(0) 6188 - 95 74.45  info@fehling-instruments.de

CERAMO®

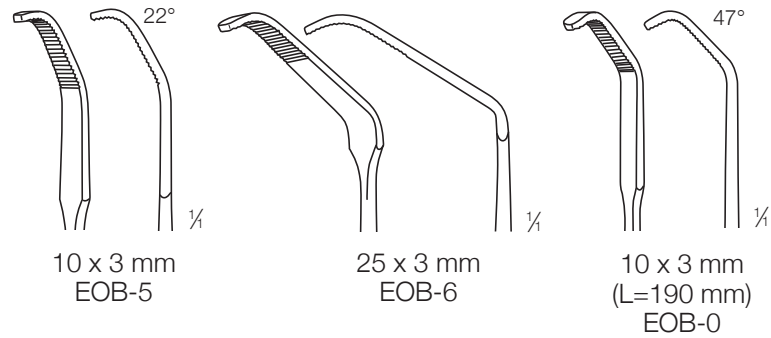
ASD/VSD RETRACTOR
HERZDEFEKTHAKEN



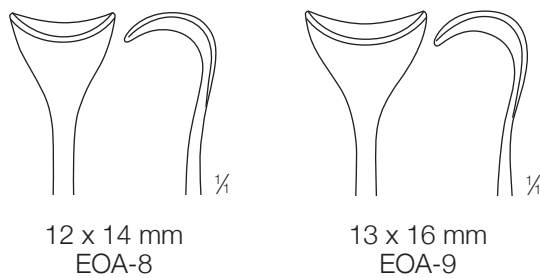
LANGENBECK



ZENKER



MOBERG



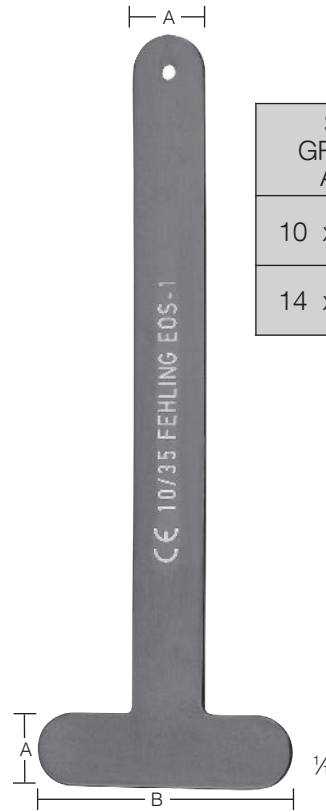
175 mm

BLADE SIZE: DEPTH (a) x WIDTH (b)
BLATTGRÖSSE: TIEFE (a) x BREITE (b)



WIDTH BREITE	
4 mm	EOI-6
8 mm	EOI-7
10 mm	EOI-8
14 mm	EOI-4
16 mm	EOI-5
19 mm	EOI-9
24 mm	EOK-0

CERAMO® SUPERPLAST
SPATULA
SPATEL
180 mm



SIZE GRÖSSE A x B	
10 x 35 mm	EOS-1
14 x 45 mm	EOS-2

CERAMO® SUPERPLAST JAQUISS
ORGAN RETRACTOR
ORGANRETRAKTOR
100 mm

SUPERPLAST instruments are made of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are malleable in normal OR temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperature, such as those found in the autoclave, the instruments regain their initial shape.

SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie bieten verschiedene Eigenschaften je nach thermischen Bedingungen. Sie sind bei normaler OP-Temperatur biegsam und können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.

blades (included)
Blätter (inklusive)



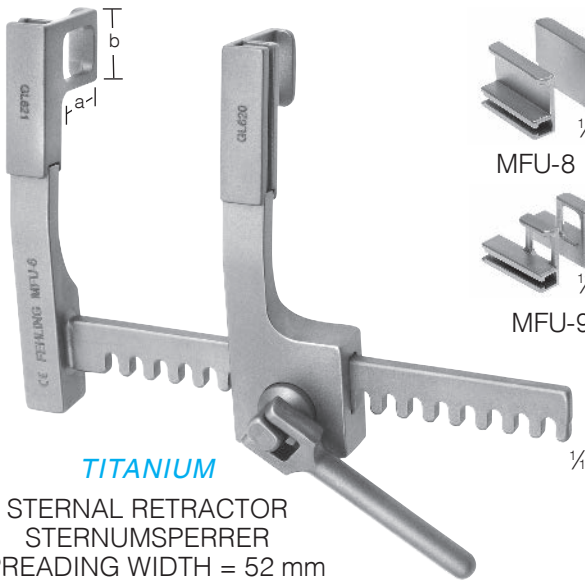
10 x 20 mm (a x b)
(PAIR / PAAR)

MFU-8



10 x 10 mm (a x b)
(PAIR / PAAR)

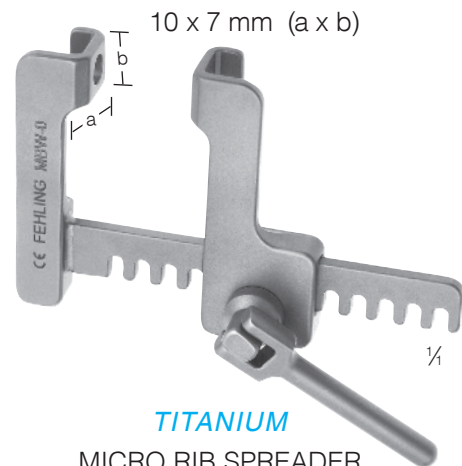
MFU-9



TITANIUM

STERNAL RETRACTOR
STERNUMSPERRER
SPREADING WIDTH = 52 mm
SPREIZWEITE = 52 mm

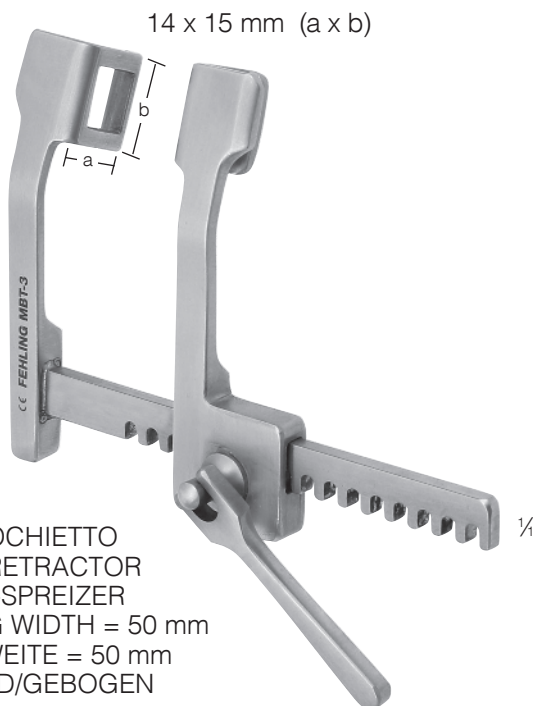
MFU-6



TITANIUM

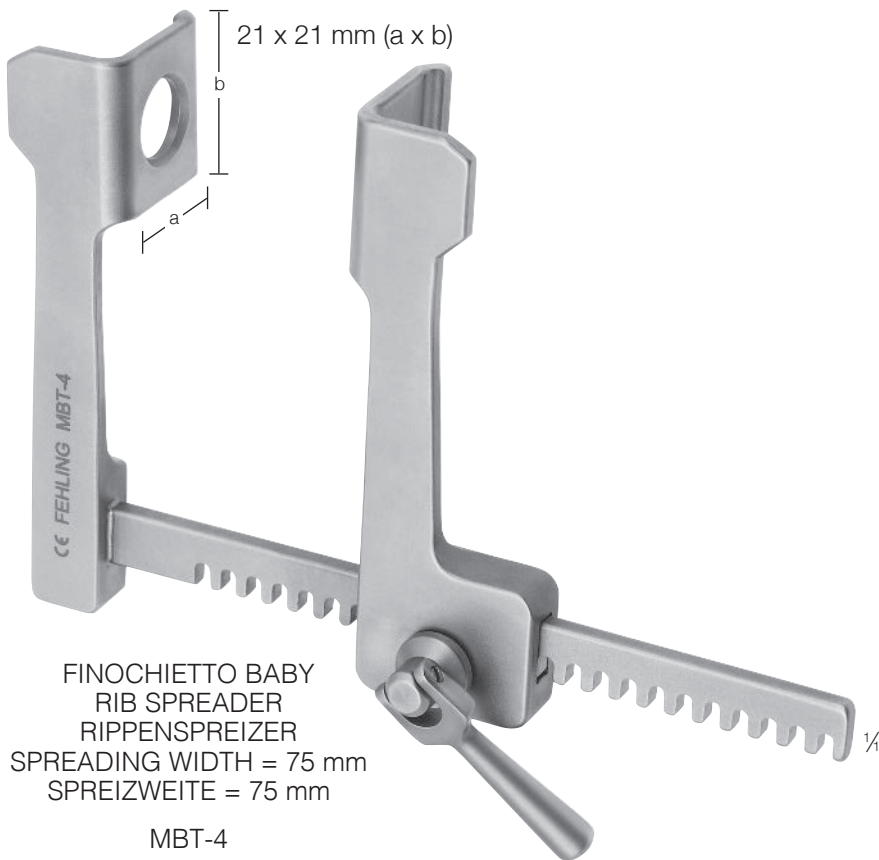
MICRO RIB SPREADER
MIKRORIPPENSPREIZER
SPREADING WIDTH = 30 mm
SPREIZWEITE = 30 mm
STRAIGHT/GERADE

MBW-0

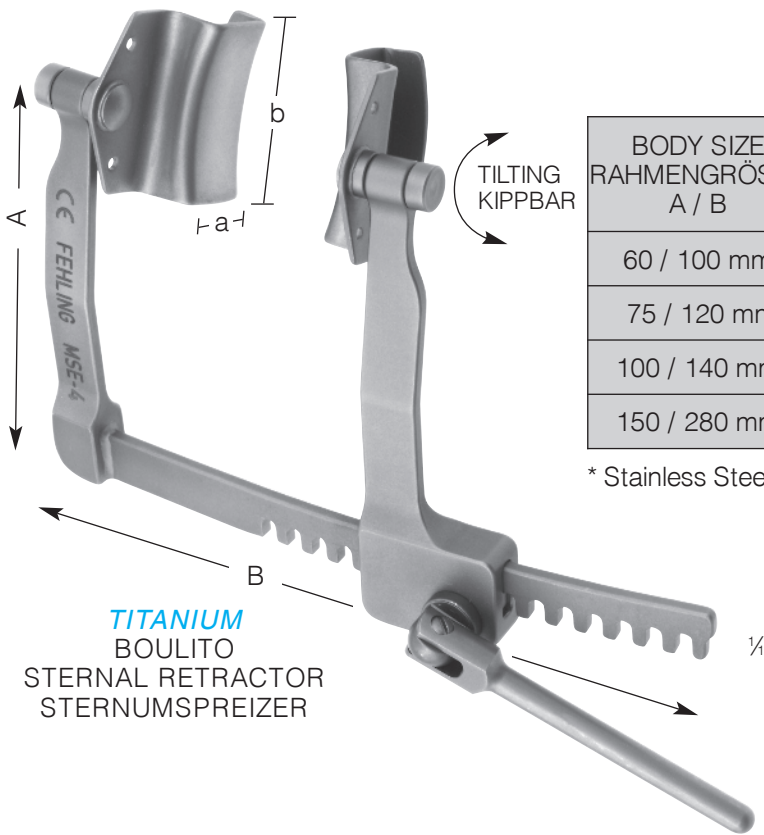


FINOCHIETTO
MINI-RETRACTOR
MINI-SPREIZER
SPREADING WIDTH = 50 mm
SPREIZWEITE = 50 mm
CURVED/GEBOGEN

MBT-3



BLADE SIZE BLATTGRÖSSE a x b	SPREADING WIDTH SPREIZWEITE	
14 x 12 mm	40 mm	MSB-1
14 x 12 mm	65 mm	MSB-2
20 x 15 mm	90 mm	MSB-6
23 x 20 mm	100 mm	MSB-3
20 x 15 mm	110 mm	MSB-7
23 x 20 mm	130 mm	MSB-4
23 x 20 mm	160 mm	MSB-5



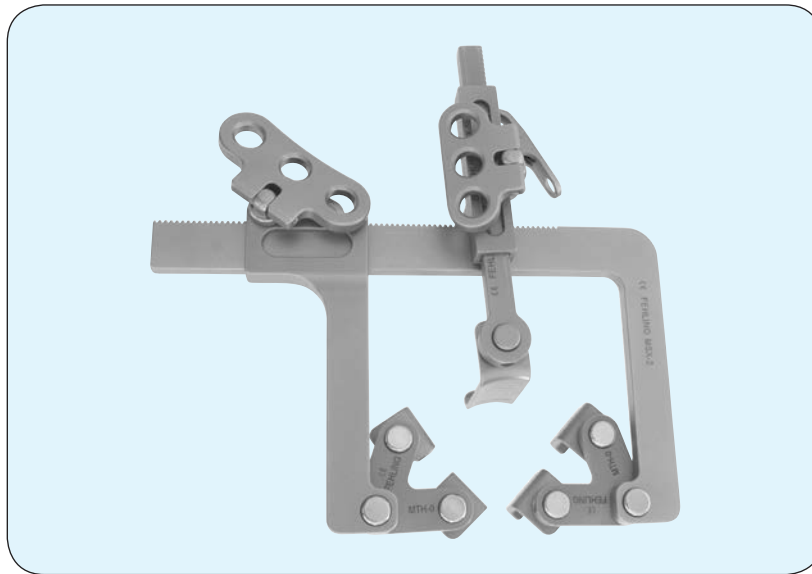
BODY SIZE RAHMENGRÖSSE A / B	BLADE SIZE BLATTGRÖSSE a x b	PATIENT WEIGHT KÖRPERGEWICHT	
60 / 100 mm	12 x 25 mm	≤ 5 kg	MSE-4
75 / 120 mm	18 x 35 mm	5 – 15 kg	MSE-5
100 / 140 mm	21 x 55 mm	15 – 30 kg	MSE-6
150 / 280 mm	30 x 100 mm	30 – 60 kg	MSE-9*

* Stainless Steel / Rostfreier Stahl

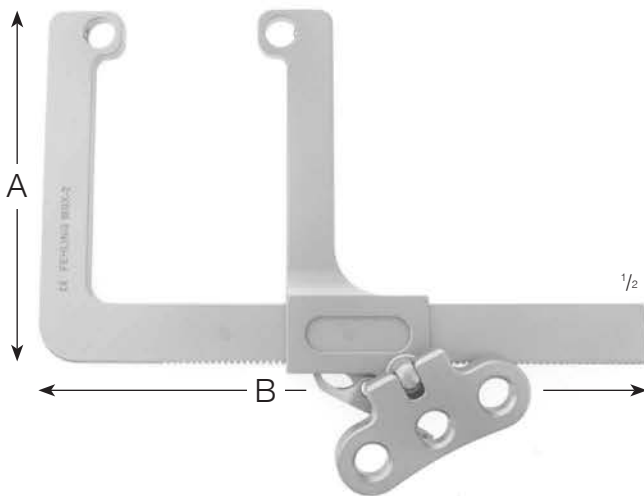


MINI THORACOTOMY RETRACTOR
MINI-THORAKOTOMIESPREIZER
115 mm
MSD-5

V-CUT
TITANIUM



exemplary configuration
Konfigurationsbeispiel



RETRACTOR, BODY
SPERRER, RAHMEN



STANDARD
MSX-5B



RIDER
SCHLITTEN

ANGLE ADJUSTABLE
WINKELVERSTELLBAR
MSX-5C



BLADE GUIDE
HAKENFÜHRUNG

MSX-5A

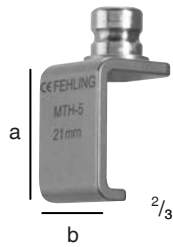


HORKE BLADE SWING
HORKE SCHAUKEL

BLADE SIZE BLATTGRÖSSE A x B	PATIENT WEIGHT KÖRPERGEWICHT	
80 x 130 mm	3 – 7 kg	MSX-1
90 x 150 mm	7 – 15 kg	MSX-2
120 x 200 mm	15 – 40 kg	MSX-3

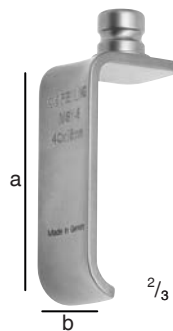
HOLE DISTANCE LOCHABSTAND	
20 mm	MTH-2
25 mm	MTH-0
35 mm	MTH-1

V-CUT
TITANIUM



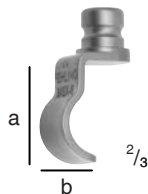
a \ b	15 mm	20 mm
15 mm	MTH-3	MTH-4
21 mm	MTH-5	MTH-6
26 mm	MTH-7	MTH-8

STERNAL BLADE
STERNUMHALTEBLATT



a \ b	15 mm	24 mm
40 mm	MSY-6	MSZ-6
50 mm	MSY-7	MSZ-7
60 mm	MSY-8	MSZ-8
70 mm	MSY-9	MSZ-9

DIAPHRAGM RETRACTOR
ZWERCHFELLHAKEN



a \ b	10 mm
20 mm	MSX-6
30 mm	MSX-7
40 mm	MSX-8

LID RETRACTOR
LIDHAKEN



225 mm
MCE-9



ANDREWS PYNCHON
240 mm

Ø	
3,0 mm	MNO-4
4,2 mm	MNO-5



245 mm
MCE-8

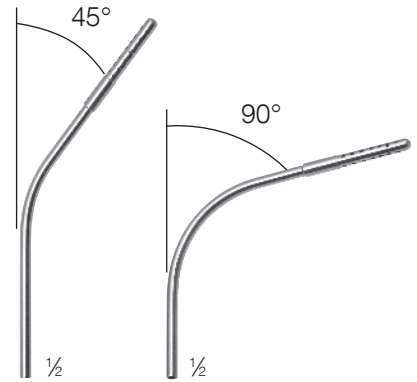


210 mm
MNE-5



SEBENING
180 mm
MNE-8

GRECO

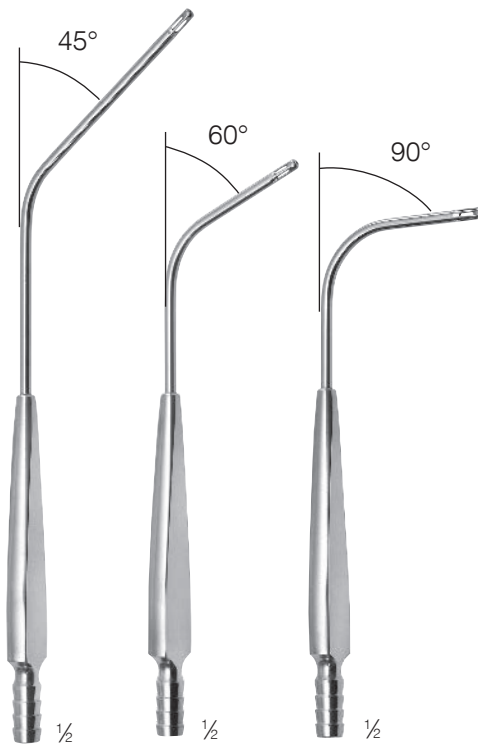


DETACHABLE BASKET / KORB ABNEHMBAR

Ø TUBE / ROHR	180 mm	160 mm
3,3 mm	MNM-1	MNM-2
5,0 mm	MNM-3	MNM-4

DETACHABLE BASKET / KORB ABNEHMBAR

Ø TUBE / ROHR	95 mm	80 mm
3,3 mm	MNM-5	MNM-6
5,0 mm	MNM-7	MNM-8



Ø TUBE / ROHR	210 mm	180 mm	150 mm
3,3 mm	MNL-2	MNL-1	MNL-3
5,0 mm	MNL-5	MNL-4	MNL-6

GRECO



DETACHABLE BASKET / KORB ABNEHMBAR

Ø TUBE / ROHR	230 mm
6,0 mm	MNL-7



DETACHABLE BASKET / KORB ABNEHMBAR

Ø TUBE / ROHR	205 mm
6,0 mm	MNL-8



Ø 7 mm
L 25 mm

MKK-5



Ø 6 mm
L 23 mm

MKN-8

VENTRICLE SUCTION CANNULA
VENTRIKELSAUGER



CARDIOPLEGIA CANNULA
KARDIOPLEGIEKANÜLE
30 mm

MZI-3



Ø OLIVE	
3,0 mm	MSF-0
4,0 mm	MSF-1
4,5 mm	MSF-2
5,0 mm	MSF-3
5,5 mm	MSF-4
6,0 mm	MSF-5
7,0 mm	MSF-6
8,0 mm	MSF-7
9,0 mm	MSF-8
10,0 mm	MSF-9
11,0 mm	MSG-1
12,0 mm	MSG-2
13,0 mm	MSG-3
14,0 mm	MSG-4
15,0 mm	MSG-5
16,0 mm	MSG-6
17,0 mm	MSG-7
18,0 mm	MSG-8
19,0 mm	MSG-9
20,0 mm	MSH-1
21,0 mm	MSH-2
22,0 mm	MSH-3
23,0 mm	MSH-4
24,0 mm	MSH-5
25,0 mm	MSH-6
26,0 mm	MSH-7
27,0 mm	MSH-8
28,0 mm	MSH-9

BOULITO SUPERPLAST
TUBULAR PROBE
TUBULARSONDE
180 mm

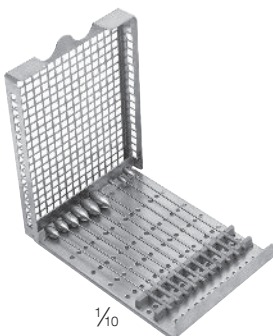


SIZE GRÖSSE	
2/7 mm	MSJ-1
3/8 mm	MSJ-2
4/9 mm	MSJ-3

ZIEMER SUPERLAST
PROBE
SONDE
180 mm

SUPERPLAST instruments are made of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are malleable in normal OR temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperature, such as those found in the autoclave, the instruments regain their initial shape.

SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie bieten verschiedene Eigenschaften je nach thermischen Bedingungen. Sie sind bei normaler OP-Temperatur biegsam und können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.



**STORAGE AND STERILIZATION TRAY
FOR BOULITO PROBES
STERILISIER- UND LAGERSIEB
FÜR BOULITO-SONDEN**

max. OLIVE Ø 17 mm 160 x 210 x 26 mm	MSG-0
max. OLIVE Ø 22 mm 160 x 210 x 30 mm	MSH-0

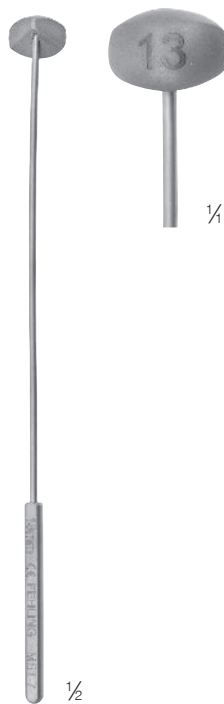


CHORDAE GAUGE AND
KNOT ASSISTANT
CHORDAE-LEHRE UND
KNOTENASSISTENT
200 mm
MNV-9



CERAMO® BOULITO RONDO
MICRO VALVE FORCEPS
MIKRO KLAPPENPINZETTE

	180 mm	210 mm	230 mm
1,0 mm	COS-0	-	-
1,5 mm	COS-7	COS-8	COR-0



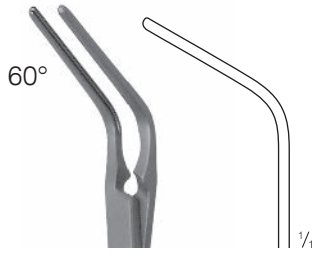
BOULITO SUPERPLAST
3D GAUGE FOR AV-RECONSTRUCTION
3D LEHRE FÜR AK-REKONSTRUKTION
190 mm

Ø ANULUS	
8 mm	MST-2
9 mm	MST-3
10 mm	MST-4
11 mm	MST-5
12 mm	MST-6
13 mm	MST-7
14 mm	MST-8
15 mm	MST-9
16 mm	MSU-0
17 mm	MSU-1
18 mm	MSU-2
19 mm	MSU-3
20 mm	MSU-4
21 mm	MSU-5
22 mm	MSU-6
23 mm	MSU-7
24 mm	MSU-8
25 mm	MSU-9

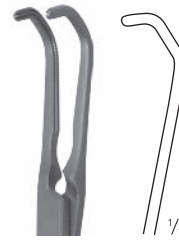


STERILIZATION TRAY FOR
BOULITO SUPERPLAST 3D-GAUGE
STERILISATIONSTRAY FÜR
BOULITO SUPERPLAST 3D-LEHRE
MST-0

TITANIUM



MHN-1



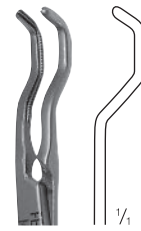
6mm
MHN-2



MHN-9



DEBAKEY
105mm



6mm
MHN-3



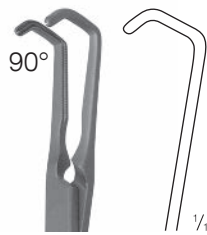
DEBAKEY
105mm



9mm
MHN-4



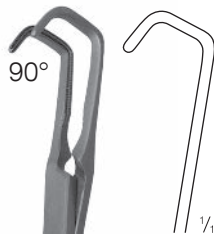
DEBAKEY
105mm



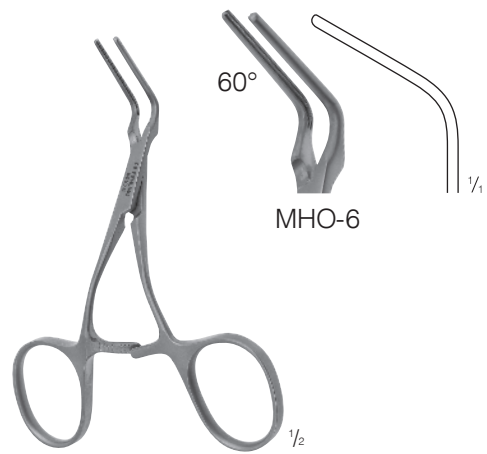
6mm
MHO-3



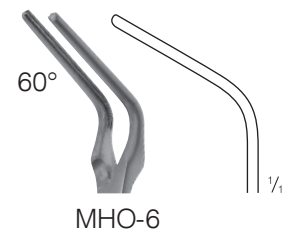
SEBENING
105mm



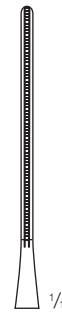
9mm
MHO-4



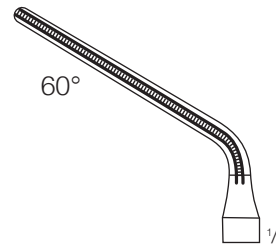
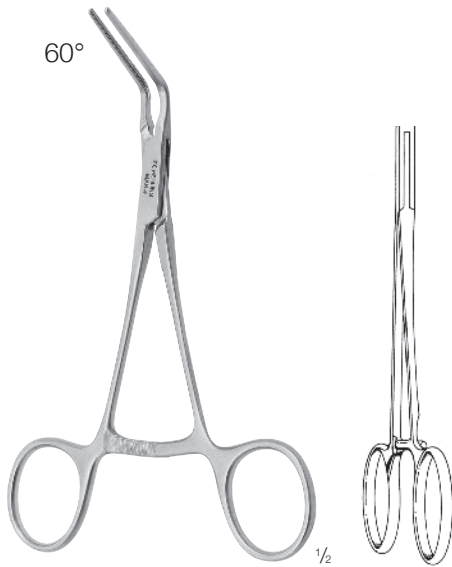
SEBENING
105mm



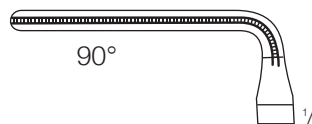
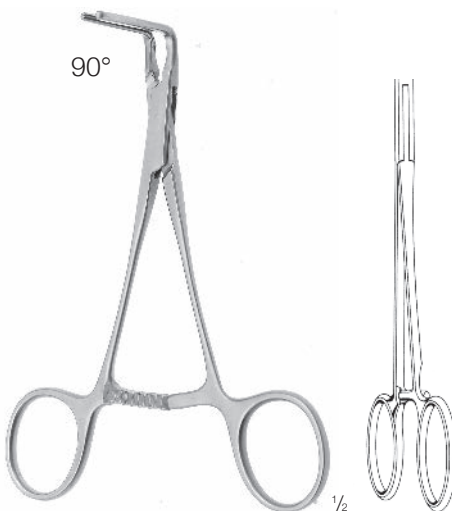
MHO-6



125 mm	145 mm	165 mm
MAC-2	MAE-7	MAH-2
MER-4	MDV-9	MER-5

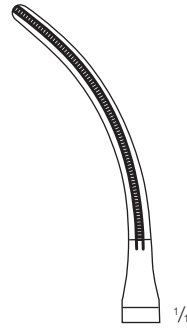


125 mm	145 mm	165 mm
MAC-4	MAE-9	MAH-4
MER-8	MDW-2	MER-9



125 mm	145 mm	165 mm
MAC-5	MAF-1	MAH-5
MES-1	MES-2	MES-3

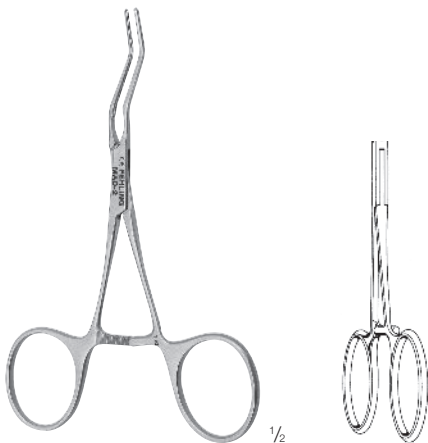
TITANIUM
TITAN



125 mm	145 mm	165 mm
MAD-1	MAF-6	MAJ-1
MET-4	MET-5	MET-6

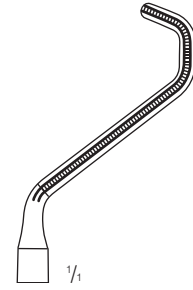


125 mm	145 mm	165 mm
MAC-9	MAF-5	MAH-9
MDT-8	MDU-2	MDU-5

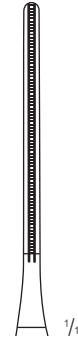


125 mm	145 mm	165 mm
MAD-2	MAF-7	MAJ-2
MET-7	MET-8	MET-9

TITANIUM
TITAN



125 mm	145 mm	165 mm
MAC-8	MAF-4	MAH-8
MET-1	MET-2	

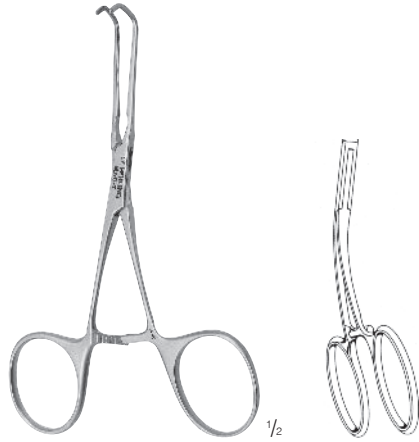


125 mm	145 mm	165 mm
MAD-3	MAF-8	MAJ-3
MEU-1	MEU-2	MEU-3



125 mm	145 mm	165 mm
MAC-6	MAF-2	MAH-6
MES-4	MES-5	MES-6

TITANIUM
TITAN

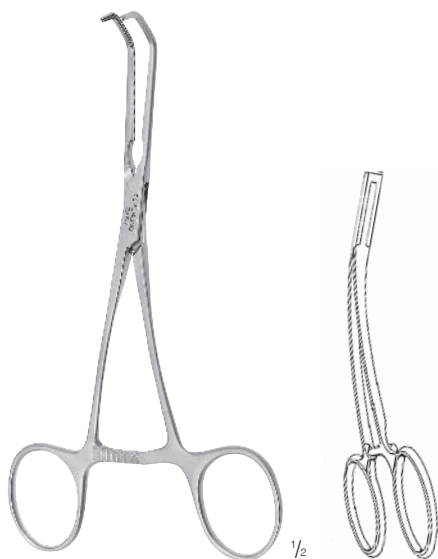


125 mm	145 mm	165 mm
MAC-7	MAF-3	MAH-7
MES-7	MES-8	MES-9



1/1

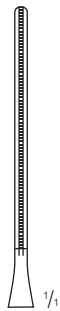
125 mm	145 mm	165 mm
MAD-9	MAG-5	MAJ-9
MEU-9	MEV-1	MEV-2



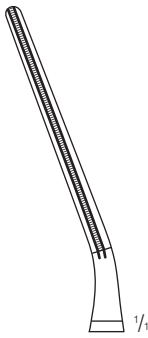
1/1

125 mm	145 mm	165 mm
ZAE-6	ZAF-7	ZAF-4

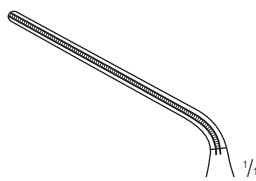
TITANIUM
TITAN

125 mm	145 mm	165 mm
MAC-3	MAE-8	MAH-3
MER-6	MDW-1	MER-7

125 mm	145 mm	165 mm
MAD-4	MAF-9	MAJ-4
MEU-4	MEU-5	MFA-1

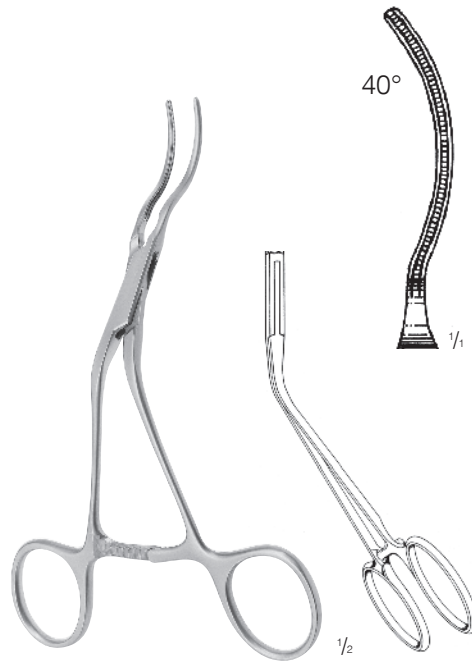
125 mm	145 mm	165 mm
MAE-3	MAG-8	MAK-3
MEV-3	MEV-4	MDW-5

TITANIUM
TITAN

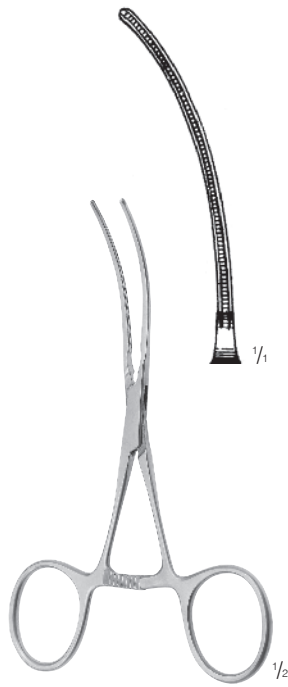


125 mm	145 mm	165 mm
MAD-6	MAG-2	MAJ-6
MEU-6		

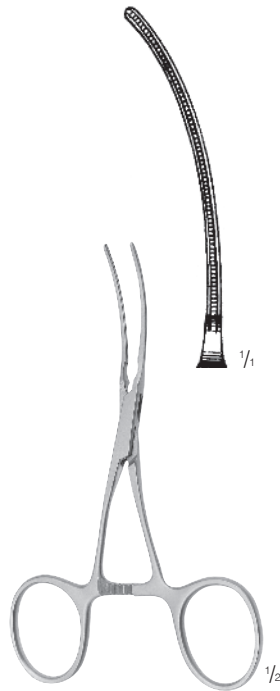
TITANIUM
TITAN



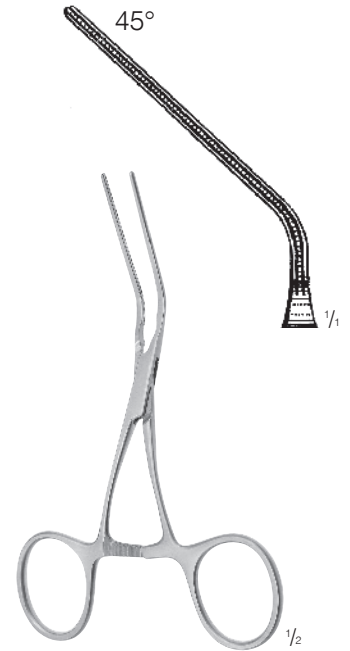
155 mm
MAH-0



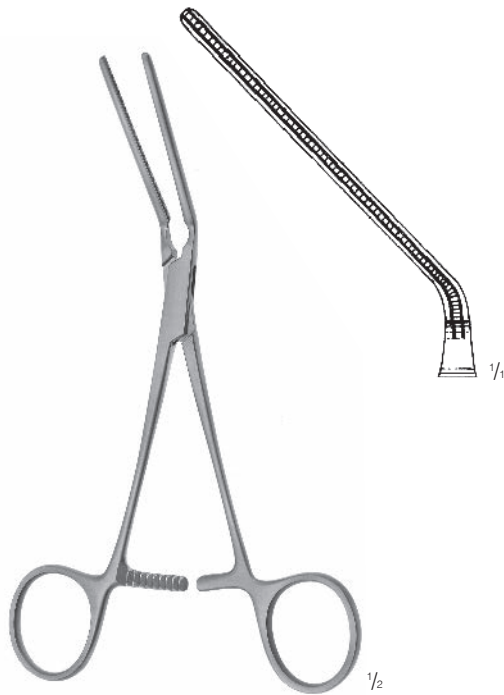
130 mm
MAE-4



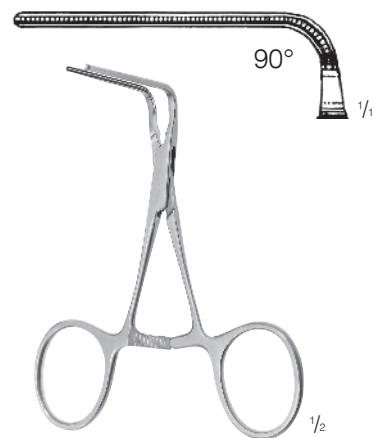
130 mm
MAE-6



130 mm
MAE-5



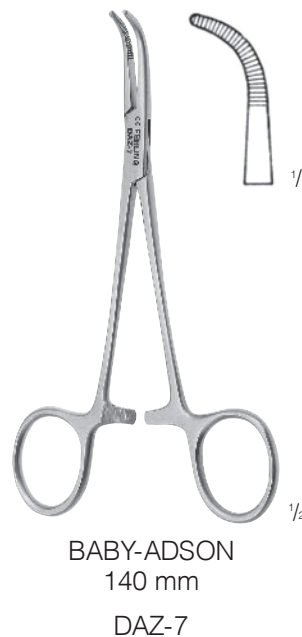
TITANIUM
175 mm
MDU-7



DE BAKEY
100 mm
MED-9

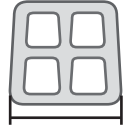


180 mm	210 mm	170 mm	200 mm
DAY-7	DAY-9	DAY-6	DAY-8

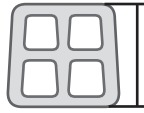
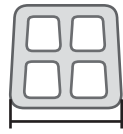


FENESTRA

STERILE PEEK CAGES



ITEM NO. ARTIKELNR.	WIDTH BREITE	DEPTH TIEFE	HEIGHT HÖHE	TITANIUM SIZERS
PL-4S	13 mm	12 mm	4 mm	SL-4
PL-5S	13 mm	12 mm	5 mm	SL-5
PL-6S	13 mm	12 mm	6 mm	SL-6
PM-4S	13 mm	14 mm	4 mm	SM-4
PM-5S	13 mm	14 mm	5 mm	SM-5
PM-6S	13 mm	14 mm	6 mm	SM-6
PA-3S	15 mm	12 mm	3 mm	SA-3
PA-4S	15 mm	12 mm	4 mm	SA-4
PA-5S	15 mm	12 mm	5 mm	SA-5
PA-6S	15 mm	12 mm	6 mm	SA-6
PA-7S	15 mm	12 mm	7 mm	SA-7
PA-8S	15 mm	12 mm	8 mm	SA-8
PB-3S	15 mm	14 mm	3 mm	SB-3
PB-4S	15 mm	14 mm	4 mm	SB-4
PB-5S	15 mm	14 mm	5 mm	SB-5
PB-6S	15 mm	14 mm	6 mm	SB-6
PB-7S	15 mm	14 mm	7 mm	SB-7
PB-8S	15 mm	14 mm	8 mm	SB-8
PC-3S	17 mm	14 mm	3 mm	SC-3
PC-4S	17 mm	14 mm	4 mm	SC-4
PC-5S	17 mm	14 mm	5 mm	SC-5
PC-6S	17 mm	14 mm	6 mm	SC-6
PC-7S	17 mm	14 mm	7 mm	SC-7
PC-8S	17 mm	14 mm	8 mm	SC-8
PD-3S	17 mm	16 mm	3 mm	SD-3
PD-4S	17 mm	16 mm	4 mm	SD-4
PD-5S	17 mm	16 mm	5 mm	SD-5
PD-6S	17 mm	16 mm	6 mm	SD-6
PD-7S	17 mm	16 mm	7 mm	SD-7
PD-8S	17 mm	16 mm	8 mm	SD-8



ITEM NO. ARTIKELNR.	WIDTH BREITE	DEPTH TIEFE	HEIGHT HÖHE	TITANIUM SIZERS
PL-4S	13 mm	12 mm	4 mm	SL-4
PL-5S	13 mm	12 mm	5 mm	SL-5
PL-6S	13 mm	12 mm	6 mm	SL-6
PM-4S	13 mm	14 mm	4 mm	SM-4
PM-5S	13 mm	14 mm	5 mm	SM-5
PM-6S	13 mm	14 mm	6 mm	SM-6
PA-3S	15 mm	12 mm	3 mm	SA-3
PA-4S	15 mm	12 mm	4 mm	SA-4
PA-5S	15 mm	12 mm	5 mm	SA-5
PA-6S	15 mm	12 mm	6 mm	SA-6

TITANIUM SETTING INSTRUMENT TITAN SETZINSTRUMENT

TRAY FOR CAGES + SIZERS BOX FÜR CAGES + SIZERS



180 mm
XRE-1



WITH ADJUSTABLE STOP UNIT
MIT VERSTELLBAREM ANSCHLAG
130/180 mm 80/180 mm
XRE-4 XRE-3



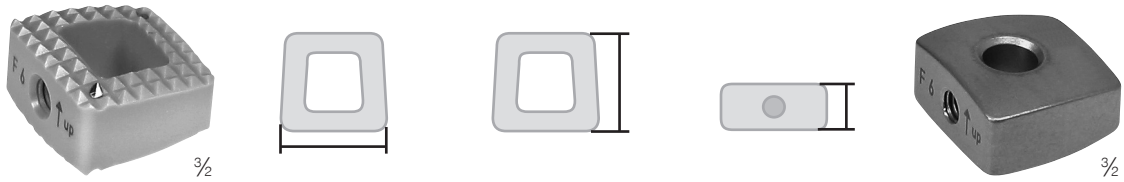
STANDARD
PAZ-3



SPECIAL SIZE
SONDERGRÖSSE
PAZ-4

FORMAR

STERILE PEEK CAGES



ITEM NO. ARTIKELNR.	WIDTH BREITE	DEPTH TIEFE	HEIGHT HÖHE	TITANIUM SIZERS
PF-3S	14 mm	13 mm	3 mm	SF-3
PF-4S	14 mm	13 mm	4 mm	SF-4
PF-5S	14 mm	13 mm	5 mm	SF-5
PF-6S	14 mm	13 mm	6 mm	SF-6
PF-7S	14 mm	13 mm	7 mm	SF-7
PG-3S	16 mm	14 mm	3 mm	SG-3
PG-4S	16 mm	14 mm	4 mm	SG-4
PG-5S	16 mm	14 mm	5 mm	SG-5
PG-6S	16 mm	14 mm	6 mm	SG-6
PG-7S	16 mm	14 mm	7 mm	SG-7
PH-4S	18 mm	14 mm	4 mm	SH-4
PH-5S	18 mm	14 mm	5 mm	SH-5
PH-6S	18 mm	14 mm	6 mm	SH-6
PH-7S	18 mm	14 mm	7 mm	SH-7



DISSECTING CURETTE
DISSEKTIONSKÜRETTE
6 x 220 mm

XSE-1



TITANIUM SETTING INSTRUMENT
TITAN SETZ-INSTRUMENT
180 mm

XRE-1



STORAGE AND STERILISATION TRAY FOR CAGES + SIZERS
LAGER- UND STERIBEHÄLTER FÜR CAGES + SIZERS

SMALL KLEIN	CAGE/SIZER TYPES CAGE/SIZER NUMMERN	PF + PG / SF + SG	PAZ-1
LARGE GROSS	CAGE/SIZER TYPES CAGE/SIZER NUMMERN	PF + PG + PH / SF + SG + SH	PAZ-2

ALTERNATIVE TOOLS* ALTERNATIVES WERKZEUG*



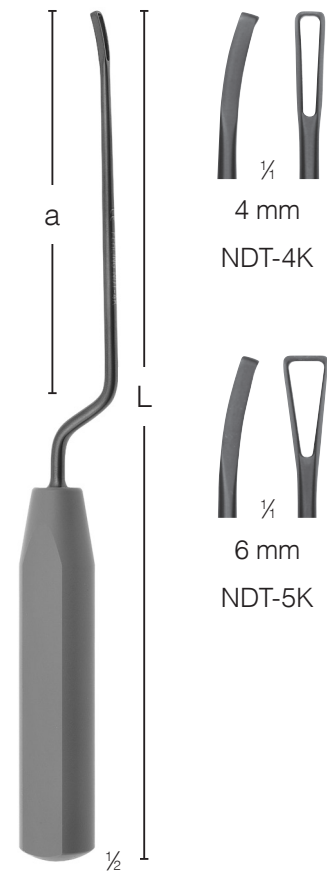
TITANIUM SETTING INSTRUMENT WITH ADJUSTABLE STOP UNIT
TITAN SETZ-INSTRUMENT MIT VERSTELLBAREM ANSCHLAG
130/180 mm

XRE-4



TITANIUM SETTING INSTRUMENT WITH ADJUSTABLE STOP UNIT
TITAN SETZ-INSTRUMENT MIT VERSTELLBAREM ANSCHLAG
80/180 mm

XRE-3



CERAMO® LANKSCH
INTERVERTEBRAL CURETTE
INTERVERTEBRAL KÜRETTE
L = 215 mm
a = 100 mm

*Does not fit into tray PAZ-1/-2

*Passt nicht in Box PAZ-1/-2

Handling Innovative Materials: Their Use and Processing

1 CERAMO®

1.1 Properties

CERAMO® surfaces are characterized by great hardness, strong resistance to oxidation and chemical inertia. They are therefore particularly suitable for a large number of clinical applications executed under hospital conditions.

1.2 Purpose

CERAMO®-coated instruments can be used wherever the same or similar instrument surfaces of stainless steel or titanium without ceramic surface protection are used. Compared with these uncoated surfaces CERAMO® surfaces offer the following advantages:

- Enhanced resistance to friction (extended useful life)
- strong resistance to oxidation
- improved antifriction properties
- reduced reflection of light.

1.3 Processing

See user information referring to the reprocessing of re-sterilisable instruments according to EN ISO 17664.

1.4 Cautionary Statements

The following should be noted when using and handling CERAMO®-coated instruments:

- The hardness of CERAMO® surfaces protects them from friction but not from plastic deformation. Resistance of a surgical instrument to plastic deformation is determined exclusively by the physical properties of the basic metal. This is why the rules governing the use of instruments with CERAMO® surfaces are the same as those applying to other instruments and why no warranty is valid in cases of abuse.
- CERAMO® -coated instruments must not be cleaned using the Orthovario- or Oxivario procedure, as those will destroy the ceramic surface in a short space of time.
- Whenever possible, only the manufacturer should repair CERAMO® -coated instruments. Repairs made by third parties may cause irreparable damage.

Specific user information has been developed for many instruments with CERAMO®-coated surfaces, such as scissors, punches and micro-instruments and is customarily included in the scope of delivery at the time of the first purchase. Please request this information if it has not been made available to you.

If used correctly as intended, damage to the instruments is largely avoided. Nevertheless, if damage occurs - perhaps caused by abuse – only the manufacturer can determine whether it can be corrected and make repairs to the degree it is technically possible. Cleaning, disinfection and sterilization must be performed prior to returning the instruments. A confirmation sheet can be obtained from the manufacturer.

2 PLASMA Needle Holders

2.1 Properties

PLASMA gripping surfaces in needle holders are, simply put, sprayed-on ceramic materials characterized by the following:

- amorphous surface structure
- superior degree of hardness
- chemical inertia (oxidation resistance).

2.2 Purpose

PLASMA needle holders are in principle used for the same purposes and in the same manner as conventional needle holders with or without hard metal inserts. But keeping in mind the useful life of the instruments, it is suggested that the restrictions and recommendations found under “Cautionary Statements” be noted.

Compared to needle holders with conventional gripping surface made of hard metal or stainless steel, PLASMA gripping surfaces offer these advantages:

- enhanced resistance to friction (extended useful life)
- strong resistance to oxidation
- direction of needle can be chosen as desired.

2.3 Processing

See user information referring to the reprocessing of re-sterilizable instruments according to EN ISO 17664.

2.4 Cautionary Statements

The following should be noted when using needle holders:

- Needle holders and the needles they hold must always maintain the correct size ratio. Details can be found in the specific user information titled “Needle Holder”. The basic rule governing PLASMA needle holders is that needle length should never exceed ten times the width of the gripping surfaces within the gripping area.
- Do not use PLASMA needle holders for needles designed to pierce bone (for example sternum wire needles).
- Never change needle position when needle holder is closed: the shearing strengths thus generated damage the PLASMA gripping surface.
- Needle holders with PLASMA gripping surfaces should be repaired only by the manufacturer whenever possible. Third party repairs may cause damage that cannot always be corrected. Cleaning, disinfection and sterilisation must be performed prior to returning the instruments. A confirmation sheet can be obtained from the manufacturer.

3 SUPERPLAST/SUPERFLEX Instruments

3.1 Properties

SUPERPLAST/SUPERFLEX instruments are made of a metal alloy with shape memory. Two variants exist:

- SUPERPLAST instruments can be deformed at room temperature. Under the effect of ambient temperatures above 80° C (washing machine, autoclave) intraoperatively deformed instruments return to their initial shape.
- SUPERFLEX instruments are superelastic at room temperature. Under a load they are deformed. When the load is removed the instrument returns to its original shape.

The properties of shape memory are retained for an unlimited time if the instruments are used for the purposes for which they are intended.

3.2 Purpose

- SUPERPLAST instruments are plastically deformed when exposed to loads, which means that after removal of the load they retain their new shape. Recommended for inducing deformation: the instrument should be placed on two thumbs held parallel to each other while both index fingers press against the instrument from above. It is absolutely necessary that the limits of the bending radius as described under “Warning” be observed.
- SUPERPLAST instruments may be repeatedly deformed during surgery. To return the instrument manually to its original shape after surgery is neither necessary nor does it serve any purpose. The instrument will automatically return to its straight initial shape during cleaning/sterilization.
- SUPERFLEX instruments react with superelasticity to applied exterior force. Instrument dimensions are in every instance adapted to the given anatomical pressure data. Examples: spreaders, probes.

3.3 Processing

See user information referring to the reprocessing of re-sterilizable instruments according to EN ISO 17664.

SUPERPLAST/SUPERFLEX instruments may be cleaned and sterilized together with conventional stainless steel instruments using the same technique. Steam sterilization is recommended to activate the shape memory of SUPERPLAST instruments. The following is important:

- SUPERPLAST instruments must be arranged so that the return to their straight shape is not inhibited by environmental factors, such as proximity of other instruments or tight spaces.
- After sterilizing allow instruments to cool to room temperature.

3.4 Cautionary Statements

The following should be noted when using and handling the instruments:

- When deforming SUPERPLAST instruments it is imperative that nothing smaller than minimum bending radiuses are used. Basic rule: the bending radius must never be less than ten times the material thickness.
- Example: The thickness of a coronary probe is about 0.8 mm at a distance of about 30 mm from the distal tip of the probe. This permits a permissible minimum bending radius of 8 mm, corresponding to an arc diameter of about 16 mm.
- Or: Brain spreaders are usually 1 mm thick. Thus the permissible minimum bending radius is about 10 mm.

Remaining below the permissible bending radius affects shape memory. The result is that during cleaning/sterilizing the instrument will still straighten but a complete return to the straight original shape can no longer be achieved: one ends up with a slightly bent instrument.

- If used correctly as intended, damage to the instruments is largely avoided. Nevertheless, if damage occurs – perhaps caused by abuse – only the manufacturer can determine whether it can be corrected and make repairs to the degree it is technically possible. Cleaning, disinfection and sterilisation must be performed prior to returning the instruments. A confirmation sheet can be obtained from the manufacturer.

4 Conclusion

The important basic rule that applies without reservations: User information and statements urging caution are useful only if they are made known to personnel within the framework of good hospital organisation and if adherence to rules is regularly monitored.

Distributed by

Item no.	Cat. no.	Cat. page
ABB-1	10	2
ABB-1	11	16
ABB-1	2	58
ABB-1	7	18
ABB-1F	2	58
ABB-2	10	2
ABB-5	11	28
BAC-8	3	13
BAC-9	3	13
BAD-2	3	13
BAD-4	3	13
BAD-5	3	13
BAD-6	3	13
BAD-7	3	13
BAD-8	3	13
BAE-1	3	13
BAE-3	3	13
BAE-4	3	13
BAE-5	3	13
BAE-6	3	13
BAE-7	3	13
BAE-9	3	13
BAF-2	3	13
BAF-3	3	13
BAF-5	3	13
BAF-7	3	13
BAF-9	3	13
BAG-1	3	13
BAG-2	3	13
BAG-4	3	13
BAG-6	3	13
BAG-7	3	13
BAG-8	3	13
BAH-1	3	13
BAH-3	3	13
BAJ-5	3	14
BAJ-7	3	14
BAZ-8	3	11
BAZ-9	3	11
BBA-1	3	11
BBA-2	3	11
BBA-3	3	11
BBA-4	3	11

Item no.	Cat. no.	Cat. page
BBA-8	3	7
BBA-9	3	7
BBB-3	3	6
BBB-4	3	6
BBB-5	3	6
BBB-6	3	6
BBB-8	3	3
BBB-9	3	3
BBC-1	3	3
BBC-2	3	3
BBC-3	3	3
BBC-4	3	3
BBC-6	3	3
BBC-7	3	3
BBC-8	3	3
BBC-9	3	3
BBD-2	3	4
BBD-3	3	4
BBD-4	3	4
BBD-6	3	4
BBD-7	3	4
BBD-8	3	4
BBD-9	3	4
BBE-2	3	4
BBE-4	3	4
BBE-5	3	4
BBE-6	3	5
BBE-7	3	5
BBE-8	3	4
BBE-9	3	4
BBF-1	3	4
BBF-2	3	4
BBF-3	3	4
BBF-4	3	4
BBF-5	3	4
BBF-6	3	4
BBF-9	3	5
BBG-1	3	5
BBG-2	3	5
BBG-3	3	5
BBG-4	3	5
BBG-5	3	5
BBG-8	3	5

Item no.	Cat. no.	Cat. page
BBG-9	3	5
BBH-1	3	5
BBH-2	3	5
BBH-3	3	5
BBH-6	3	7
BBH-7	3	7
BBJ-0	3	2
BBJ-6	3	14
BBJ-7	3	14
BBJ-8	3	2
BBK-2	3	9
BBO-1B	10	11
BCH-6	3	4
BCH-7	3	4
BCJ-5	3	11
BCJ-6	3	11
BCL-7	3	11
BCN-8	3	15
BCS-1	3	5
BCS-2	3	8
BCY-3	3	9
BOA-1	3	3
BOA-2	3	3
BOA-3	3	3
BOA-4	3	3
BOA-5	3	3
BOA-6	3	3
BOA-7	3	3
BOA-8	3	3
BOB-0	3	2
BOB-1	3	2
BOB-1B	3	2
BOB-2	3	2
BOB-3	3	6
BOB-4	3	6
BOB-5	3	6
BOB-6	3	6
BOB-7	3	3
BOB-8	3	3
BOC-4	3	4
BOC-5	3	4
BOC-6	3	4
BOD-1	3	4

Item no.	Cat. no.	Cat. page
BOD-2	3	4
BOD-3	3	4
BOD-4	3	4
BOD-5	3	5
BOD-6	3	5
BOD-7	3	5
BOD-8	3	5
BOE-1	3	4
BOE-3	3	4
BOE-5	3	4
BOE-6	3	4
BOE-7	3	4
BOF-0	3	5
BOF-1	3	4
BOF-2	3	4
BOF-3	3	4
BOF-4	3	4
BOF-5	3	5
BOF-6	3	5
BOF-7	3	5
BOF-8	3	5
BOF-9	3	4
BOI-1	3	13
BOI-2	3	13
BOI-3	3	13
BOI-4	3	13
BOI-5	3	13
BOI-6	3	13
BOI-7	3	13
BOI-8	3	13
BOJ-1	3	13
BOJ-2	3	13
BOJ-3	3	13
BOJ-4	3	13
BOJ-5	3	13
BOJ-6	3	13
BOJ-7	3	13
BOJ-8	3	13
BOK-1	3	13
BOK-2	3	13
BOK-3	3	13
BOK-4	3	13
BOK-5	3	13

Item no.	Cat. no.	Cat. page
BOK-6	3	13
BOL-1	3	14
BOL-2	3	14
BOL-3	3	16
BOL-4	3	14
BOL-5	3	14
BOL-6	3	15
BOL-7	3	16
BOL-8	3	16
BOM-4	3	11
BOM-5	3	11
BOM-6	3	11
BOM-7	3	11
BOM-8	3	11
BOM-9	3	11
BON-1	3	7
BON-2	3	7
BON-3	3	7
BON-4	3	7
BON-5	3	7
BON-6	3	7
BON-7	3	7
BON-8	3	7
BOO-0	3	5
BOO-2	3	5
BOO-4	3	5
BOO-5	3	5
BOO-6	3	5
BOO-7	3	5
BOO-8	3	5
BOO-9	3	5
BOP-1	3	11
BOP-2	3	11
BOP-3	3	11
BOP-4	3	11
BOP-5	3	11
BOP-6	3	11
BOP-7	3	12
BOP-8	3	12
BOP-9	3	12
BOR-1	3	12
BOR-2	3	12
BOR-3	3	12

Item no.	Cat. no.	Cat. page
BOR-4	3	12
BOR-5	3	12
BOR-6	3	10
BOR-7	3	12
BOR-8	3	12
BOS-1	3	9
BOS-2	3	16
BOS-3	3	16
BOS-4	3	16
BOS-5	3	8
BOS-6	3	8
BOS-7	3	8
BOS-8	3	8
BOT-1	3	8
BOT-2	3	8
BOT-3	3	8
BOT-4	3	8
BOT-5	3	7
BOT-6	3	7
BOT-7	3	9
BOT-8	3	8
BOV-1W	3	6
BOV-2W	3	6
BOV-3W	3	6
BOV-4W	3	6
BOV-5W	3	6
BOV-6W	3	6
BOV-7	3	10
BOV-8	3	10
BOV-9	3	10
BOW-7	3	16
BOW-8	3	16
BOW-9	3	16
BOX-0	3	16
BOY-2	3	9
BOY-3	3	9
BOY-4	3	9
BOY-5	3	9
BOZ-1	3	15
BOZ-2	3	15
BOZ-7	3	8
BRA-0	1	15
BRA-0L	1	15

Item no.	Cat. no.	Cat. page
BRA-6	1	15
BRA-6L	1	15
BRA-7	1	15
BRA-7L	1	15
BRA-8	1	15
BRA-8L	1	15
BRA-9	1	15
BRA-9L	1	15
BRC-0	1	10
BRC-1	1	10
BRC-2	1	10
BRC-3	1	10
BRC-4	1	10
BRC-5	1	10
BRC-6	1	10
BRC-7	1	10
BRC-8	1	10
BRD-0	1	10
BRD-1	1	11
BRD-2	1	11
BRD-3	1	11
BRD-4	1	11
BRD-5	1	11
BRD-6	1	11
BRD-7	1	11
BRD-8	1	11
BRE-1	1	10
BRE-2	1	10
BRE-3	1	10
BRE-4	1	10
BRE-5	1	10
BRE-6	1	10
BRE-7	1	10
BRE-8	1	10
BRF-0	1	11
BRF-3	1	11
BRF-4	1	11
BRF-5	1	11
BRF-8	1	11
BRF-9	1	11
BRI-1	1	14
BRI-2	1	14
BRI-3	1	14

Item no.	Cat. no.	Cat. page
BRI-4	1	14
BRI-5	1	14
BRK-1	1	10
BRK-2	1	10
BRK-3	1	10
BRK-5	1	10
BRK-6	1	10
BRK-7	1	10
BRK-8	1	10
BRL-1	1	10
BRL-2	1	10
BRL-3	1	10
BRL-4	1	10
BRL-5	1	10
BRL-6	1	10
BRL-7	1	10
BRL-8	1	10
BRM-5	3	2
BRS-1	1	10
BRS-2	1	10
BRS-3	1	10
BRS-4	1	10
BRV-1	1	10
BRV-2	1	10
BRV-3	1	10
BRV-4	1	10
BRV-5	1	10
BRV-6	1	10
BRV-7	1	10
BRV-8	1	10
BRW-1	1	11
BRW-2	1	11
BRZ-0	1	12
BRZ-1	1	12
BRZ-2	1	12
BRZ-3	1	12
BRZ-4	1	12
BRZ-5	1	12
BRZ-6	1	12
BRZ-7	1	12
BRZ-8	1	12
BRZ-9	1	12
BSA-0	1	12

Item no.	Cat. no.	Cat. page
BSA-8	1	12
BSA-9	1	12
BSB-0	1	12
BSD-1	1	13
BSD-2	1	13
BSD-3	1	13
BSD-4	1	13
BSD-5	1	13
BSF-1	1	12
BSF-2	1	12
BSF-3	1	12
BSF-4	1	12
BSF-5	1	12
BSF-6	1	12
BSG-1	1	12
BSG-2	1	12
BSG-3	1	12
BSG-4	1	12
BSH-1	1	11
BSH-2	1	11
BSH-3	1	11
BSH-4	1	11
BSH-5	1	11
BSH-6	1	11
BSH-7	1	11
BSH-8	1	11
BSI-1	1	10
BSI-2	1	10
BSI-3	1	10
BSI-4	1	10
BSI-6	1	13
BSI-7	1	13
BSI-8	1	13
BSJ-5	1	10
BSK-1	1	14
BSK-4	1	14
BSK-6	1	14
BSK-7	1	14
BSK-8	1	14
BSK-9	1	10
BSL-0	1	13
BSL-2	1	10
BSL-3	1	10

Item no.	Cat. no.	Cat. page
BSL-4	1	13
BSL-6	1	13
BSL-7	1	10
BSL-8	1	14
BSL-9	1	13
BSM-0	1	14
BSM-2	1	13
BSM-3	1	13
BSM-4	1	13
BSM-6	1	14
BSM-7	1	14
BSM-8	1	14
BSN-0	1	14
BSN-1	1	11
BSN-2	1	11
BSN-4	1	10
BSN-5	1	10
BSP-1	1	13
BSP-3	1	13
BSP-4	1	13
BSP-5	1	13
BSZ-1	1	12
BSZ-3	1	12
BSZ-4	1	12
CAA-2	4	7
CAA-3	4	7
CAA-5	4	7
CAA-6	4	7
CAA-9	4	8
CAB-1	4	8
CAB-2	4	8
CAB-3	4	8
CAB-4	4	8
CAB-5	4	8
CAB-6	4	8
CAB-7	4	8
CAC-3	4	8
CAC-4	4	8
CAC-5	4	8
CAC-6	4	8
CAC-7	4	8
CAC-8	4	8
CAC-9	4	8

Item no.	Cat. no.	Cat. page
CAD-1	4	8
CAE-8	4	6
CAF-0	4	6
CAG-8	4	7
CAG-9	4	7
CAK-7	4	9
CAK-8	4	9
CAK-9	4	4
CAL-1	4	9
CAL-2	4	9
CAL-5	4	10
CAL-6	4	10
CAL-7	4	10
CAL-8	4	10
CAL-9	4	10
CAM-1	4	10
CAM-2	4	10
CAM-4	4	10
CAM-5	4	10
CAN-2	4	11
CAN-5	4	11
CAN-6	4	11
CAN-9	4	11
CAP-1	4	11
CAP-2	4	11
CAP-3	4	11
CAP-4	4	11
CAP-5	4	11
CAP-7	4	11
CAP-8	4	10
CAP-9	4	10
CAR-1	4	10
CAS-8	4	10
CAS-9	4	10
CAT-2	4	9
CAU-3	4	9
CAU-4	4	9
CAU-5	4	9
CAU-9	4	9
CAV-1	4	9
CAY-6	4	5
CAY-7	4	5
CAY-8	4	5

Item no.	Cat. no.	Cat. page
CAY-9	4	5
CAZ-1	4	5
CAZ-2	4	5
CAZ-4	4	5
CAZ-6	4	7
CAZ-7	4	7
CAZ-8	4	9
CAZ-9	4	9
CBA-7	4	7
CBA-8	4	7
CBA-9	4	7
CBB-1	4	7
CBB-2	4	7
CBP-9	4	6
CDK-7	4	3
CDN-6	4	3
CDP-2	11	8
CDP-2	4	4
CDP-3	11	8
CDP-3	4	4
CDP-5	11	8
CDP-5	4	4
CDP-7	4	4
COA-0	1	2
COA-3	1	2
COA-4	1	2
COA-5	1	2
COA-6	1	2
COA-8	1	2
COB-1	1	2
COB-2	1	2
COB-3	1	2
COB-4	1	2
COB-5	1	2
COB-6	1	2
COB-7	1	2
COB-8	1	2
COB-9	1	2
COC-1	1	2
COC-2	1	2
COC-3	1	2
COC-4	1	2
COC-6	1	2

Item no.	Cat. no.	Cat. page
COD-0	1	2
COD-1	1	2
COD-2	1	2
COD-3	1	2
COD-4	1	2
COD-5	1	2
COD-6	1	2
COD-7	1	2
COD-9	1	2
COE-0	1	2
COE-1	1	2
COE-2	1	2
COE-3	1	2
COE-4	1	2
COE-5	1	2
COE-6	1	2
COE-7	1	2
COE-8	1	2
COE-9	1	2
COF-0	1	2
COF-1	1	2
COF-2	1	2
COF-3	1	2
COF-4	1	2
COF-5	1	2
COF-6	1	2
COF-7	1	2
COF-8	1	2
COG-0	1	5
COG-1	1	5
COG-2	1	5
COG-3	1	5
COG-4	1	5
COG-5	1	5
COG-6	1	3
COG-7	1	3
COG-8	1	3
COG-9	1	3
COH-0	1	3
COI-1	4	10
COI-2	4	10
COI-3	4	10
COI-9	1	3

Item no.	Cat. no.	Cat. page
COJ-1	1	3
COJ-2	1	3
COJ-4	1	3
COJ-5	1	3
COJ-6	1	3
COJ-7	1	3
COK-1	4	6
COK-2	4	6
COK-3	4	6
COL-1	1	3
COL-2	1	3
COL-3	1	3
COL-4	1	3
COL-5	1	3
COL-6	1	3
COL-7	1	3
COL-8	1	3
COM-5	1	4
COM-6	1	4
COM-7	1	4
COM-8	1	4
CON-1	1	5
CON-2	1	5
CON-3	1	5
CON-4	1	5
CON-5	1	5
CON-6	1	5
CON-7	1	5
CON-8	1	5
COP-1	1	5
COP-2	1	5
COP-3	1	5
COP-4	1	5
COP-5	4	7
COP-6	4	7
COP-7	4	9
COP-8	4	9
COP-9	4	10
COR-0	1	2
COR-0	PC	13
COR-1	4	8
COR-2	4	8
COR-3	4	8

Item no.	Cat. no.	Cat. page
COR-4	4	8
COR-5	4	8
COR-6	4	8
COR-7	4	8
COR-8	4	8
COR-9	4	8
COS-0	1	2
COS-0	PC	13
COS-1	1	2
COS-2	1	2
COS-3	1	2
COS-4	1	2
COS-7	1	2
COS-7	PC	13
COS-8	1	2
COS-8	PC	13
COT-0	1	4
COT-1	1	4
COT-2	1	4
COT-3	1	4
COT-4	1	4
COT-5	1	4
COT-6	1	4
COT-7	1	4
COT-8	1	4
COT-9	1	4
COU-0	1	4
COU-1	1	4
COU-2	1	4
COU-3	1	4
COU-4	1	4
COU-5	1	4
COU-6	1	4
COU-7	1	4
COU-8	1	4
COU-9	1	4
COV-1	1	2
COV-2	1	2
COV-3	1	2
COV-4	1	2
COV-5	1	2
COV-6	1	2
COV-7	1	2

Item no.	Cat. no.	Cat. page
COV-8	1	2
COW-1	4	6
COW-2	4	9
COW-3	4	9
COW-4	4	9
COW-5	4	9
COW-6	4	7
COW-7	4	5
COW-8	4	5
COW-9	4	9
COX-0	4	4
COX-1	1	2
COX-3	1	2
COX-4	1	2
COX-7	1	2
COX-8	1	2
COX-9	1	2
COY-1	1	2
COY-2	1	2
COY-3	1	2
COY-4	1	2
COY-5	1	2
COY-6	1	2
COY-7	1	2
COY-8	1	2
COZ-0	4	8
COZ-1	4	8
COZ-2	4	8
COZ-3	4	8
COZ-4	4	8
COZ-5	4	8
COZ-6	4	8
COZ-7	4	7
COZ-8	4	7
COZ-9	4	7
CPA-1	1	4
CPA-2	1	4
CRB-1	4	5
CZB-1	4	10
CZB-2	4	11
CZB-3	4	11
CZB-4	4	11
CZB-5	4	11

Item no.	Cat. no.	Cat. page
CZB-6	4	11
CZB-7	4	11
CZB-8	4	10
CZB-9	4	10
CZD-1	4	10
CZD-2	4	10
CZD-3	4	10
CZD-4	4	10
CZD-5	4	10
CZD-7	4	10
CZD-8	4	10
CZD-9	4	10
CZE-1	1	4
CZE-2	1	4
DAA-6	4	53
DAA-7	4	53
DAA-9	4	53
DAB-2	4	53
DAB-8	4	54
DAD-6	4	53
DAD-7	4	53
DAF-7	4	53
DAG-1	4	49
DAG-2	4	53
DAG-3	4	49
DAG-4	4	49
DAL-6	4	49
DAV-0	4	48
DAV-1	4	48
DAV-2	4	50
DAV-3	4	50
DAV-4	4	50
DAV-5	4	50
DAV-6	4	50
DAW-0	4	48
DAW-3	4	51
DAW-4	4	51
DAW-5	4	51
DAW-6	4	51
DAW-7	4	51
DAW-8	4	51
DAW-9	4	51
DAX-1	4	51

Item no.	Cat. no.	Cat. page
DAX-2	4	51
DAX-3	4	51
DAX-4	4	51
DAX-5	4	51
DAX-6	4	51
DAX-7	4	51
DAX-9	4	48
DAY-6	4	47
DAY-6	PC	22
DAY-7	4	47
DAY-7	PC	22
DAY-8	4	47
DAY-8	PC	22
DAY-9	4	47
DAY-9	PC	22
DAZ-1	4	49
DAZ-7	4	47
DAZ-7	PC	22
DAZ-8	4	47
DAZ-8	PC	22
DBA-1	4	48
DBA-1	PC	22
DBA-2	4	48
DBA-2	PC	22
DBA-3	4	14
DBA-4	4	14
DBA-5	4	14
DBF-4	4	51
DBF-5	4	51
DBF-9	4	51
DBG-1	4	51
DBK-6	4	48
DBK-7	4	50
DBK-8	4	50
DBK-9	4	50
DBL-1	4	50
DBL-2	4	50
DBL-4	4	52
DBL-5	4	52
DBM-2	4	59
DBM-5	4	60
DBM-6	4	60
DBM-7	4	60

Item no.	Cat. no.	Cat. page
DBP-5	4	60
DBV-6	4	58
DBV-9	4	58
DBW-1	4	58
DBW-3	4	58
DBY-5	4	58
DBY-7	4	58
DBY-8	4	58
DBZ-1	4	58
DBZ-8	4	53
DCA-4	4	49
DCB-6	4	59
DCB-7	4	59
DCB-8	4	59
DCC-6	4	53
DCC-7	4	53
DCC-8	4	53
DCG-8	4	47
DCG-8	PC	22
DCG-9	4	59
DCH-1	4	59
DCM-7	4	60
DCM-8	4	60
DCN-6	4	59
DDA-2	11	8
ECB-4	2	31
ECB-5	2	31
ECB-6	2	31
ECF-0	2	30
ECG-7	2	30
ECO-1	2	50
ECO-2	2	50
ECO-3	2	50
ECP-5H	10	14
EEF-1	2	34
EEJ-1	11	18
EEJ-2	11	18
EEK-1F	11	17
EEK-1F	2	35
EEK-5	2	36
EEK-6	2	36
EEK-7	2	36
EEK-8	2	36

Item no.	Cat. no.	Cat. page
EEK-9	2	38
EEL-1G	2	35
EEL-1K	2	35
EEL-1S	2	35
EEL-4F	11	18
EEL-4F	2	36
EEL-5	2	36
EEL-6	2	36
EEL-7	2	36
EEL-8	2	36
EEL-9	2	36
EEM-1	2	36
EEM-2F	2	36
EEM-5	2	38
EEM-6	2	38
EEM-8	2	38
EEN-0	2	38
EEN-1	2	38
EEN-2K	2	37
EEN-2V	2	37
EEN-3	2	37
EEN-4	2	38
EEN-5	2	38
EEN-6	2	38
EEN-7	2	38
EEN-8	2	38
EEN-9	2	38
EEO-5	2	38
EEO-6	2	38
EEP-0	11	18
EEP-0	2	36
EEP-7	11	17
EEV-1	2	30
EEV-2	2	30
EEV-3	2	30
EEV-4	2	30
EOA-1	2	33
EOA-3	2	33
EOA-8	2	33
EOA-8	PC	2
EOA-9	2	33
EOA-9	PC	2
EOB-0	2	32

Item no.	Cat. no.	Cat. page
EOB-0	PC	2
EOB-1	2	32
EOB-1	PC	2
EOB-2	2	32
EOB-2	PC	2
EOB-3	2	32
EOB-3	PC	2
EOB-5	2	32
EOB-5	PC	2
EOB-6	2	32
EOB-6	PC	2
EOB-7	2	32
EOB-7	PC	2
EOC-1	10	11
EOC-2	10	11
EOC-3	10	11
EOC-4	10	11
EOC-6	10	11
EOC-7	10	11
EOC-8	10	11
EOF-1	2	33
EOF-2	2	33
EOF-3	2	33
EOF-4	2	33
EOF-5	2	33
EOI-1	10	12
EOI-2	10	12
EOI-3	10	12
EOI-4	10	12
EOI-4	PC	3
EOI-5	10	12
EOI-5	PC	3
EOI-6	10	12
EOI-6	PC	3
EOI-7	10	12
EOI-7	PC	3
EOI-8	10	12
EOI-8	PC	3
EOI-9	10	12
EOI-9	PC	3
EOJ-7	2	18
EOK-0	PC	3
EOK-1	10	12

Item no.	Cat. no.	Cat. page
EOK-2	10	12
EOK-3	10	12
EOK-4	10	12
EOK-5	10	12
EOK-7	10	12
EOK-8	10	12
EOK-9	10	12
EOL-1	10	13
EOL-2	10	13
EOL-3	10	13
EOL-4	10	13
EOL-5	10	13
EOM-1	10	13
EOM-2	10	13
EOM-3	10	13
EOM-4	10	13
EOM-5	10	13
EOS-1	PC	3
EOS-2	PC	3
FBA-1C	2	49
FBA-2C	2	49
FBA-3C	2	49
FBA-4C	2	49
FBA-5C	2	49
FBA-6C	2	49
FBA-7C	2	49
FBB-1C	2	49
FBB-2C	2	49
FBB-3C	2	49
FBB-4C	2	49
FBB-5C	2	49
FBB-6C	2	49
FBB-7C	2	49
HAA-4	8	11
HAH-9	8	15
HAI-2	8	15
HAI-3	8	15
HAP-4	8	8
HAP-5	8	8
HAP-9	8	7
HAR-0	8	7
HAR-1	8	7
HAR-2	8	7

Item no.	Cat. no.	Cat. page
HAR-3	8	7
HAR-4	8	7
HAT-5	8	7
HAV-1	8	4
HAV-2	8	4
HAV-3	8	4
HAV-4	8	4
HAV-5	8	4
HAV-6	8	4
HAV-7V	8	3
HAV-8V	8	3
HAV-9V	8	3
HAW-0V	8	3
HAW-1	8	5
HAW-2	8	5
HAW-3	8	5
HAW-4	8	5
HAW-5V	8	3
HAW-6V	8	3
HBA-1V	8	3
HBA-2V	8	3
HBA-3V	8	3
HBA-4V	8	3
HBA-5	8	4
HBA-6	8	4
KAA-4	11	9
KAA-5	11	9
KAA-6	11	9
KAA-7	11	9
KAA-8	11	9
KAB-0	11	9
KAF-0	5	8
KAG-8	5	4
KAG-9	5	4
KAH-1	5	4
KAH-2	5	4
KAH-3	5	4
KAH-4	5	4
KAJ-5	11	9
KAJ-5	5	10
KAJ-6	5	10
KAL-0	5	4
KAL-6	5	4

Item no.	Cat. no.	Cat. page
KAM-1	5	6
KAM-7	5	9
KAP-4	5	4
KAP-5	5	4
KAP-6	5	4
KAP-7	5	4
KAP-8	5	4
KAP-9	5	4
KAR-1	5	4
KAU-9	5	8
KAV-5	5	5
KAV-6	5	7
KAV-7	5	7
KBG-0	5	5
KBG-1	5	5
KBG-2	5	5
KBR-9	3	16
KBS-2	3	16
KBS-3	3	16
KBW-1	5	10
KBW-2	5	10
KCA-7	11	9
KCB-8	11	9
KCB-9	11	9
KCC-0	11	16
KCC-1	11	9
KCP-0	5	4
KCP-5	5	4
KDD-0	11	16
KDD-0B	11	16
KKA-1	5	2
KKA-2	5	2
KKA-3	5	2
KKA-4	5	2
KKA-5	5	2
KKB-1	5	2
KKB-2	5	2
KKB-3	5	2
KKB-4	5	2
KKB-5	5	2
KOA-1	1	6
KOA-2	1	6
KOA-7	1	6

Item no.	Cat. no.	Cat. page
KOA-9	1	6
KOB-1	1	6
KOB-2	1	6
KOB-3	1	6
KOB-4	1	6
KOB-5	1	6
KOB-6	1	6
KOB-7	1	6
KOB-8	1	6
KOC-1	1	9
KOC-2	1	9
KOC-3	1	8
KOC-4	1	8
KOC-5	1	8
KOC-7	1	8
KOD-0	1	6
KOD-2	1	6
KOD-4	1	6
KOD-5	1	6
KOD-6	1	6
KOE-0	1	6
KOF-0	1	6
KOF-1	5	4
KOF-2	5	4
KOF-7	5	4
KOF-8	5	4
KOF-9	5	4
KOG-1	5	4
KOG-4	5	4
KOG-5	5	4
KOG-6	5	4
KOH-2	5	3
KOH-6	5	3
KOK-0	1	6
KOK-5	1	6
KOK-7	1	6
KOK-9	1	6
KOL-1	1	6
KOL-2	1	6
KOL-3	1	6
KOL-6	1	6
KOL-8	1	6
KOM-0	1	8

Item no.	Cat. no.	Cat. page
KOM-1	1	8
KOM-2	1	8
KOM-3	1	8
KOM-4	1	8
KOM-5	1	8
KOM-6	1	8
KOM-7	1	8
KOM-8	1	8
KON-1	1	8
KON-2	1	8
KON-3	1	8
KON-4	1	8
KON-5	1	8
KON-7	5	8
KON-8	5	8
KOO-2	5	6
KOP-1	5	7
KOP-2	5	7
KOR-0	5	2
KOR-2	5	2
KOS-1	5	5
KOS-2	5	5
KOS-3	5	5
KOS-4	5	5
KOS-5	5	5
KOS-7	5	9
KOT-0	1	6
KOT-1	1	9
KOT-4	1	6
KOT-5	1	6
KOT-8	1	6
KOT-9	1	6
KOU-0	1	6
KOU-3	1	7
KOU-4	1	7
KOU-5	1	7
KOU-6	1	7
KOV-1	1	8
KOV-2	1	8
KOV-3	1	8
KOV-4	1	8
KOV-5	1	8
KOV-6	1	8

Item no.	Cat. no.	Cat. page
KOV-7	1	8
KOV-9	1	7
KOW-0	1	7
KOX-9	1	6
KOY-0	1	6
KOY-1	1	6
KOY-2	1	6
KOY-3	1	6
KOY-4	1	6
KOY-6	1	6
KOY-9	1	6
KOZ-0	1	6
KOZ-1	1	8
KOZ-2	1	8
KOZ-3	1	8
KOZ-4	1	8
KOZ-5	1	6
KOZ-6	1	6
KOZ-7	1	6
KOZ-8	1	6
KRA-0	1	8
KRA-1	1	6
KRA-7	1	8
KRA-8	1	8
KRA-9	1	8
KRB-0	1	8
KRB-1	1	6
LAE-4	6	25
LAE-6	6	25
LAE-7	6	25
LAE-8	6	25
LAE-9	6	25
LAF-1	11	9
LAH-7	6	25
LAZ-6K	7	4
LAZ-8K	7	4
LAZ-9K	7	4
LBA-0K	7	4
LBA-1K	7	4
LBA-3K	7	4
LBA-4K	7	4
LBA-6K	7	4
LBA-7K	7	4

Item no.	Cat. no.	Cat. page
LBA-9K	7	4
LBB-0K	7	4
LBB-1K	7	4
LBB-2K	7	4
LBB-4K	7	4
LBB-5K	7	4
LBB-7K	7	4
LBB-8K	7	5
LBB-9K	7	5
LBC-0K	7	5
LBC-1K	7	5
LBC-2K	7	5
LBC-4K	7	5
LBC-5K	7	5
LBC-7K	7	5
LBH-4	7	6
LBH-5	7	6
LBH-6	7	6
LBH-8	7	6
LBH-9	7	6
LBI-1K	7	4
LBI-2K	7	4
LBI-3K	7	4
LBI-4K	7	4
LBI-5K	7	4
LBI-6K	7	4
LBI-7K	7	4
LBI-8K	7	4
LBJ-1	7	6
LBJ-2	7	6
LBJ-3	7	6
LBJ-4	7	6
LBJ-5	7	6
LBJ-7	7	6
LBJ-8	7	6
LBJ-9	7	6
LBK-6K	7	2
LBK-7K	7	2
LBK-8K	7	2
LBK-9K	7	2
LBL-1K	7	2
LBL-2K	7	2
LBL-3K	7	2

Item no.	Cat. no.	Cat. page
LBL-4K	7	2
LBL-5K	7	2
LBL-6K	7	2
LBL-7K	7	3
LBL-8K	7	3
LBL-9K	7	3
LBM-1K	7	3
LBM-2K	7	3
LBM-3K	7	3
LBM-4K	7	3
LBM-6K	7	3
LBM-7K	7	3
LBM-8K	7	3
LBM-9K	7	3
LBN-1K	7	3
LBN-2K	7	3
LBN-3K	7	3
LBO-1K	7	5
LBO-2K	7	5
LBO-3K	7	5
LBO-4K	7	5
LBO-5K	7	5
LBO-6K	7	5
LBO-7K	7	5
LBO-8K	7	5
LBQ-2K	7	4
LBQ-4K	7	4
LBQ-5K	7	4
LBQ-6K	7	4
LBQ-7K	7	4
LBR-1	7	6
LBR-2	7	6
LBR-3	7	6
LBR-4	7	6
LBR-5	7	6
LBR-6	7	6
LBW-2	7	18
LBW-4	7	18
LBW-6	7	18
LBW-8	7	18
LFI-0	11	17
LFI-1	11	17
LFI-2	11	17

Item no.	Cat. no.	Cat. page
LFI-3	11	17
LFI-4	11	17
LFI-5	11	17
LFI-6	11	17
LGJ-5	11	9
LMH-0F	2	48
LMI-3F	2	48
LMI-4F	2	48
LMI-5F	2	48
LMI-6F	2	48
LMI-8F	2	48
LMI-9F	2	48
LMJ-0F	2	48
LMJ-5	2	47
LMJ-6	2	47
LMJ-8	2	47
LMJ-9	2	47
LMK-1	2	47
LMT-4	11	19
LMT-4	2	46
LPN-1K	7	4
LPN-2K	7	4
LPN-3K	7	4
LPN-4K	7	4
LPN-5K	7	4
LPN-6K	7	4
LPN-7K	7	4
LPN-8K	7	4
LPP-1K	7	5
LPP-2K	7	5
LPP-3K	7	5
LPP-4K	7	5
LPP-5K	7	5
LPP-6K	7	5
LPP-7K	7	5
LPP-8K	7	5
LPQ-1K	7	7
LPQ-2K	7	7
LPQ-3K	7	7
LPQ-4K	7	7
LPQ-5K	7	7
LPQ-6K	7	7
LPQ-7K	7	7

Item no.	Cat. no.	Cat. page
LPQ-8K	7	7
LQA-1K	7	7
LQA-2K	7	7
LQA-3K	7	7
LQA-4K	7	7
LQA-5K	7	7
LQA-6K	7	7
LQA-7K	7	7
LQD-1K	7	7
LQD-2K	7	7
LQD-3K	7	7
LQD-5K	7	7
LQD-7K	7	7
LQD-8K	7	7
LQD-9K	7	7
LVB-1	2	45
LVB-2	2	46
LVB-2A	2	46
LVB-3	2	46
LVB-3A	2	46
LVB-4	2	46
LVB-4A	2	46
LVB-5	2	45
LVB-6	2	45
LVB-7	2	45
LVB-8	2	45
MAA-9	4	34
MAB-1	4	34
MAB-2	4	34
MAB-3	4	34
MAB-4	4	34
MAB-9	4	36
MAC-1	4	28
MAC-2	4	21
MAC-2	PC	15
MAC-3	4	25
MAC-3	PC	19
MAC-4	4	21
MAC-4	PC	15
MAC-5	4	21
MAC-5	PC	15
MAC-6	4	23
MAC-6	PC	17

Item no.	Cat. no.	Cat. page
MAC-7	4	24
MAC-7	PC	18
MAC-8	4	23
MAC-8	PC	17
MAC-9	4	22
MAC-9	PC	16
MAD-1	4	22
MAD-1	PC	16
MAD-3	4	23
MAD-3	PC	17
MAD-4	4	25
MAD-4	PC	19
MAD-6	4	26
MAD-6	PC	20
MAD-9	4	24
MAD-9	PC	18
MAE-3	4	25
MAE-3	PC	19
MAE-4	4	27
MAE-4	PC	21
MAE-5	4	27
MAE-5	PC	21
MAE-6	4	27
MAE-6	PC	21
MAE-7	4	21
MAE-7	PC	15
MAE-8	4	25
MAE-8	PC	19
MAE-9	4	21
MAE-9	PC	15
MAF-1	4	21
MAF-1	PC	15
MAF-2	4	23
MAF-2	PC	17
MAF-3	4	24
MAF-3	PC	18
MAF-4	4	23
MAF-4	PC	17
MAF-5	4	22
MAF-5	PC	16
MAF-6	4	22
MAF-6	PC	16
MAF-7	4	22

Item no.	Cat. no.	Cat. page
MAF-7	PC	16
MAF-8	4	23
MAF-8	PC	17
MAF-9	4	25
MAF-9	PC	19
MAG-2	4	26
MAG-2	PC	20
MAG-5	4	24
MAG-5	PC	18
MAG-8	4	25
MAG-8	PC	19
MAH-0	4	26
MAH-0	PC	20
MAH-2	4	21
MAH-2	PC	15
MAH-3	4	25
MAH-3	PC	19
MAH-4	4	21
MAH-4	PC	15
MAH-5	4	21
MAH-5	PC	15
MAH-6	4	23
MAH-6	PC	17
MAH-7	4	24
MAH-7	PC	18
MAH-8	4	23
MAH-8	PC	17
MAH-9	4	22
MAH-9	PC	16
MAJ-1	4	22
MAJ-1	PC	16
MAJ-2	4	22
MAJ-2	PC	16
MAJ-3	4	23
MAJ-3	PC	17
MAJ-4	4	25
MAJ-4	PC	19
MAJ-6	4	26
MAJ-6	PC	20
MAJ-9	4	24
MAJ-9	PC	18
MAK-3	4	25
MAK-3	PC	19

Item no.	Cat. no.	Cat. page
MAK-9	4	36
MAM-4	4	19
MAM-5	4	19
MAM-6	4	19
MAM-7	4	19
MAM-8	4	19
MAM-9	4	19
MAN-2	4	19
MAN-3	4	19
MAN-4	4	19
MAN-5	4	19
MAN-6	4	19
MAN-8	4	32
MAO-1	4	19
MAO-2	4	19
MAO-3	4	19
MAP-2	4	41
MAP-3	4	41
MAP-7	4	32
MAP-8	4	28
MAP-9	4	28
MAQ-8	11	15
MAR-2	4	29
MAR-4	4	29
MAR-5	4	29
MAR-9	4	29
MAS-1	4	28
MAS-4	4	31
MAS-5	4	31
MAS-7	4	31
MAS-8	4	31
MAS-9	4	31
MAT-1	4	31
MAT-7	4	43
MAT-8	4	43
MAT-9	4	43
MAU-1	4	44
MAU-2	4	44
MAU-3	4	32
MAU-4	4	32
MAU-5	4	35
MAU-7	4	54
MAU-8	4	41

Item no.	Cat. no.	Cat. page
MAU-9	4	40
MAV-1	4	29
MAV-2	4	29
MAV-4	4	36
MAV-5	4	36
MAW-5	4	18
MAW-6	4	18
MAW-7	4	18
MAW-8	4	18
MAX-1	4	18
MAX-2	4	38
MAX-3	4	38
MAX-6	4	33
MAX-7	4	33
MAX-8	4	33
MAY-1	4	35
MAY-2	4	35
MAZ-2	4	43
MAZ-5	4	32
MAZ-6	4	32
MAZ-7	4	17
MAZ-8	4	17
MAZ-9	4	17
MBA-0	4	17
MBA-1	4	17
MBA-2	4	17
MBA-4	4	17
MBA-8	4	35
MBB-2	4	38
MBB-3	4	38
MBB-8	4	37
MBB-9	4	37
MBC-0	4	17
MBC-1	4	37
MBC-2	4	37
MBC-3	4	37
MBC-9	4	13
MBD-2	4	41
MBE-1	4	33
MBE-2	4	36
MBE-3	4	36
MBE-4	4	36
MBE-5	4	37

Item no.	Cat. no.	Cat. page
MBE-6	4	37
MBE-7	4	37
MBE-8	4	37
MBE-9	4	37
MBF-0	11	15
MBF-2	4	28
MBF-5	4	35
MBG-7	4	42
MBK-2	4	2
MBK-3	4	2
MBK-4	4	2
MBK-7	4	3
MBK-8	4	3
MBK-9	4	3
MBL-1	4	3
MBL-2	4	2
MBL-3	4	2
MBL-4	4	2
MBL-5	4	2
MBL-6	4	2
MBL-7	4	2
MBL-8	4	2
MBL-9	4	2
MBM-2	4	2
MBM-4	4	2
MBM-5	4	2
MBM-6	4	2
MBM-7	4	2
MBP-1	4	3
MBP-2	4	3
MBP-3	4	3
MBP-4	4	3
MBP-5	4	3
MBP-6	4	3
MBR-2	11	9
MBT-3	2	3
MBT-3	PC	4
MBT-4	2	3
MBT-4	PC	5
MBT-5	2	3
MBU-0	2	10
MBU-1	2	10
MBU-4	2	10

Item no.	Cat. no.	Cat. page
MBU-5	2	10
MBW-0	2	3
MBW-0	PC	4
MBW-1	2	9
MBW-1B	2	9
MBW-1R	2	9
MCA-2	11	27
MCC-0	8	15
MCC-1	8	15
MCE-8	8	12
MCE-8	PC	9
MCE-9	8	12
MCE-9	PC	9
MCP-7	4	46
MDU-7	4	27
MDU-7	PC	21
MDU-9	2	15
MDU-9B	2	15
MDU-9C	2	15
MDU-9R	2	15
MDV-7	4	31
MDV-9	4	21
MDV-9	PC	15
MDW-1	4	25
MDW-1	PC	19
MDW-2	4	21
MDW-2	PC	15
MDW-3	4	35
MDW-5	4	25
MDW-5	PC	19
MDY-9	4	42
MDZ-1	4	2
MEA-4	4	30
MEA-5	4	30
MEA-6	4	30
MEA-7	4	30
MEC-2	4	18
MED-3	4	3
MED-4	4	3
MED-5	4	3
MED-9	4	27
MED-9	PC	21
MEE-3	4	42

Item no.	Cat. no.	Cat. page
MEE-4	4	42
MEE-8	4	17
MEE-9	4	17
MEF-1	4	18
MEF-5	8	16
MEF-6	8	16
MEF-7	8	16
MEF-8	8	16
MEJ-2	4	2
MEJ-3	4	2
MEJ-4	4	2
MEJ-5	4	2
MEJ-7	4	2
MEJ-8	4	2
MEJ-9	4	2
MEK-1	4	2
MEK-2	4	2
MEK-7	4	38
MEL-7	8	11
MEP-2	4	42
MEP-4	4	29
MEP-8	4	34
MEP-9	4	29
MER-4	4	21
MER-4	PC	15
MER-5	4	21
MER-5	PC	15
MER-6	4	25
MER-6	PC	19
MER-7	4	25
MER-7	PC	19
MER-8	4	21
MER-8	PC	15
MER-9	4	21
MER-9	PC	15
MES-4	4	23
MES-4	PC	17
MES-5	4	23
MES-5	PC	17
MES-6	4	23
MES-6	PC	17
MES-7	4	24
MES-7	PC	18

Item no.	Cat. no.	Cat. page
MES-8	4	24
MES-8	PC	18
MET-4	4	22
MET-4	PC	16
MET-5	4	22
MET-5	PC	16
MET-6	4	22
MET-6	PC	16
MET-7	4	22
MET-7	PC	16
MET-8	4	22
MET-8	PC	16
MET-9	4	22
MET-9	PC	16
MEU-4	4	25
MEU-4	PC	19
MEU-5	4	25
MEU-5	PC	19
MEU-6	4	26
MEU-6	PC	20
MEV-1	4	24
MEV-1	PC	18
MEV-2	4	24
MEV-2	PC	18
MEV-3	4	25
MEV-3	PC	19
MEV-4	4	25
MEV-4	PC	19
MEX-7	4	46
MEX-8	4	46
MFF-6	4	54
MFF-7	4	54
MFF-8	4	54
MFG-8	4	3
MFG-9	4	3
MFH-1	4	3
MFO-8	8	16
MFP-1	8	16
MFR-2	4	34
MFR-3	4	34
MFR-4	4	34
MFR-5	4	34
MFR-6	4	34

Item no.	Cat. no.	Cat. page
MFT-0	11	4
MFT-1	11	4
MFT-5	11	4
MFT-6	11	4
MFT-7	11	4
MFT-8	11	4
MFT-9	11	4
MFU-1	11	4
MFU-2	11	4
MFU-6	2	3
MFU-6	PC	4
MFU-6R	2	3
MFU-8	2	3
MFU-8	PC	4
MFU-9	2	3
MFU-9	PC	4
MFV-6	2	29
MFV-7	2	29
MFV-8	2	29
MFV-9	2	29
MFW-0	2	29
MFW-2	2	29
MFW-3	2	29
MFW-4	2	29
MFW-5	2	29
MFW-6	2	29
MFW-7	2	29
MHC-7	4	33
MHC-8	4	33
MHC-9	4	33
MHD-3	4	26
MHD-4	4	26
MHD-5	4	31
MHD-7	4	31
MHF-6	4	32
MHM-9	4	20
MHM-9	PC	14
MHN-1	4	20
MHN-1	PC	14
MHN-2	4	20
MHN-2	PC	14
MHN-3	4	20
MHN-3	PC	14

Item no.	Cat. no.	Cat. page
MHN-4	4	20
MHN-4	PC	14
MHO-3	4	20
MHO-3	PC	14
MHO-4	4	20
MHO-4	PC	14
MHO-6	4	20
MHO-6	PC	14
MIC-4	4	13
MIC-5	4	13
MIC-6	4	13
MIC-7	4	13
MID-1	11	28
MID-2	11	28
MID-3	11	28
MID-4	11	28
MID-5	11	28
MID-6	11	28
MIE-1	11	28
MIE-2	11	28
MIE-3	11	28
MIE-4	11	28
MIE-5	11	28
MIE-6	11	28
MIE-7	11	28
MIE-8	11	28
MIG-0	11	28
MIG-1	11	28
MIG-2	11	28
MIG-3	11	28
MIG-4	11	28
MIG-5	11	28
MIG-6	11	28
MIG-7	11	28
MIG-8	11	28
MIG-9	11	28
MIH-1	11	5
MIH-2	11	5
MIH-3	11	5
MIH-4	11	5
MIH-5	11	5
MIH-6	11	5
MIH-7	11	5

Item no.	Cat. no.	Cat. page
MIH-8	11	5
MIH-9	11	5
MKE-5	4	15
MKK-5	8	15
MKK-5	PC	11
MKK-8	4	36
MKK-9	4	36
MKN-8	8	15
MKN-8	PC	11
MKS-9	4	15
MKT-1	4	15
MKT-2	4	16
MKV-1	11	4
MKV-2	11	4
MLC-2V	2	8
MLC-6	4	39
MLC-7	4	39
MLC-8	2	9
MLE-7	2	9
MLM-3V	2	8
MLM-6V	2	8
MMA-1	4	15
MMA-2	4	16
MMA-7	11	26
MMA-7	8	10
MMA-8	4	16
MMA-9	4	16
MMB-0	11	26
MMB-0	8	10
MMB-1	4	16
MMB-2	4	16
MMB-3	4	16
MMC-0	11	26
MMC-0	8	10
MME-1	11	26
MME-1	8	10
MME-2	11	26
MME-2	8	10
MME-3	8	10
MME-4	8	10
MME-5	11	26
MME-5	8	10
MMF-3	4	16

Item no.	Cat. no.	Cat. page
MMF-4	4	16
MMF-5	4	16
MMF-7	4	15
MMF-8	4	16
MMJ-0	11	26
MMJ-0	8	10
MMJ-6	11	26
MMJ-6	8	10
MMK-2	11	4
MML-0	2	9
MML-6	4	15
MML-7	4	15
MML-8	4	15
MML-9	4	16
MMM-0	4	17
MMM-1	4	16
MMM-2	4	16
MMM-3	4	16
MMM-4	4	16
MMN-6	2	15
MMN-6C	2	15
MMN-6D	2	15
MMN-6E	2	15
MMN-6R	2	15
MMT-1	11	26
MMT-1	8	10
MMV-0	4	40
MMZ-1	2	9
MMZ-2	2	9
MMZ-4	2	9
MMZ-5	2	9
MNA-0	11	5
MNA-2	11	5
MNA-3	11	5
MNA-4	11	5
MNA-5	11	5
MNB-1	11	5
MNB-2	11	5
MNB-3	11	5
MNB-4	11	5
MNB-5	11	5
MNC-1	11	5
MNC-2	11	5

Item no.	Cat. no.	Cat. page
MNC-3	11	5
MNC-4	11	5
MNC-5	11	5
MND-1	11	5
MND-2	11	5
MND-3	11	5
MND-4	11	5
MND-5	11	5
MNE-1	2	2
MNE-2	2	2
MNE-3	2	2
MNE-3V	2	2
MNE-4	2	2
MNE-5	8	12
MNE-5	PC	9
MNE-8	8	12
MNE-8	PC	9
MNF-0	11	26
MNF-0	8	10
MNF-5	8	11
MNF-6	8	10
MNG-0	11	5
MNG-1	11	5
MNG-3	11	5
MNG-4	11	5
MNG-5	11	5
MNG-6	11	5
MNG-7	11	5
MNG-8	11	5
MNG-9	11	5
MNH-0	11	5
MNH-1	11	5
MNH-2	11	5
MNH-3	11	5
MNH-4	11	5
MNH-5	11	5
MNH-6	11	5
MNH-7	11	5
MNH-8	11	5
MNH-9	11	5
MNI-6	4	18
MNI-7	4	18
MNJ-1	4	18

Item no.	Cat. no.	Cat. page
MNJ-2	4	18
MNJ-3	4	18
MNJ-4	4	18
MNK-0	11	28
MNK-1	11	28
MNK-2	11	28
MNK-3	11	5
MNK-4	11	5
MNK-6	11	5
MNK-7	11	5
MNK-8	11	5
MNK-9	11	5
MNL-1	8	13
MNL-1	PC	10
MNL-2	8	13
MNL-2	PC	10
MNL-3	8	13
MNL-3	PC	10
MNL-4	8	13
MNL-4	PC	10
MNL-5	8	13
MNL-5	PC	10
MNL-6	8	13
MNL-6	PC	10
MNL-7	8	14
MNL-7	PC	11
MNL-8	8	14
MNL-8	PC	11
MNM-1	8	13
MNM-1	PC	10
MNM-2	8	13
MNM-2	PC	10
MNM-3	8	13
MNM-3	PC	10
MNM-4	8	13
MNM-4	PC	10
MNM-5	8	13
MNM-5	PC	10
MNM-6	8	13
MNM-6	PC	10
MNM-7	8	13
MNM-7	PC	10
MNM-8	8	13

Item no.	Cat. no.	Cat. page
MNM-8	PC	10
MNN-2	4	40
MNN-3	4	40
MNN-4	4	40
MNO-0	8	11
MNO-4	8	12
MNO-4	PC	9
MNO-5	8	12
MNO-5	PC	9
MNO-8	8	11
MNU-1V	2	13
MNV-0	11	22
MNV-1	11	11
MNV-4	11	11
MNV-6	11	11
MNV-7	11	11
MNV-8	11	11
MNV-9	PC	13
MNW-1	11	6
MNW-2	11	6
MNW-3	11	6
MNW-4	11	6
MNW-5	11	6
MNW-6	11	6
MNW-7	11	6
MNX-1	11	22
MNX-2	11	22
MNX-3	11	22
MNX-4	11	22
MNX-5	11	22
MNX-6	11	22
MNX-7	11	22
MNX-8	11	22
MNX-9	11	22
MNY-9	11	6
MNZ-0	11	6
MNZ-2	11	6
MNZ-3	11	6
MNZ-4	11	6
MNZ-5	11	6
MNZ-6	11	6
MNZ-7	11	6
MNZ-8	11	6

Item no.	Cat. no.	Cat. page
MNZ-9	11	6
MOA-1	11	10
MOA-2	11	10
MOA-3	11	10
MOA-4	11	10
MOA-5	11	10
MOA-6	11	10
MOA-7	11	10
MOA-8	11	10
MOA-9	11	10
MOB-1	11	10
MOB-4	11	10
MOB-5	11	10
MOC-1	11	10
MOC-2	11	10
MOC-3	11	10
MOD-2	11	4
MOD-3	11	4
MOD-4	11	4
MOD-5	11	4
MOE-2	11	4
MOE-3	11	4
MOE-4	11	4
MOE-5	11	4
MOH-2	11	4
MOH-3	11	4
MOH-4	11	4
MOH-5	11	4
MPA-2L	11	2
MPA-2R	11	2
MPA-3L	11	2
MPA-3R	11	2
MPA-4L	11	2
MPA-4R	11	2
MPA-5	11	2
MPA-6	11	2
MPA-7	11	2
MPA-8	11	2
MPA-9	11	2
MPB-1	11	2
MPB-2	11	2
MPB-3	11	2
MPB-5L	11	2

Item no.	Cat. no.	Cat. page
MPB-5R	11	2
MPB-6L	11	2
MPB-6R	11	2
MPB-7L	11	2
MPB-7R	11	2
MPC-0A	11	2
MPC-0C	11	2
MPC-0P	11	2
MPC-1L	11	2
MPC-1R	11	2
MPF-1H	2	16
MQC-1I	11	19
MQC-2I	11	19
MQC-3I	11	19
MQC-4I	11	19
MQC-6I	11	19
MQC-7I	11	19
MQC-8I	11	19
MQC-9I	11	19
MQE-1I	11	19
MQE-2I	11	19
MQE-3I	11	19
MQF-1	11	19
MQF-2	11	19
MQG-1	2	13
MQG-2	2	13
MQG-3	2	13
MQG-5	2	13
MQI-1	2	11
MQI-2	2	11
MQI-3	2	11
MQL-1	2	12
MQL-2	2	12
MQL-3	2	12
MQL-4	2	12
MQL-5	2	12
MQL-6	2	12
MQL-7	2	12
MQL-8	2	12
MQL-9	2	12
MQM-1	2	12
MQM-2	2	12
MQM-3	2	12

Item no.	Cat. no.	Cat. page
MRA-0	11	12
MRA-1V	11	15
MRA-2V	11	15
MRA-3	11	12
MRA-3B	11	12
MRA-4	11	12
MRA-5	11	12
MRA-6	11	12
MRA-7	11	12
MRA-8	11	12
MRA-8B	11	12
MRA-9	11	12
MRB-0V	11	15
MRB-1	11	12
MRB-2	11	12
MRB-4	11	13
MRB-6	11	13
MRB-6B	11	13
MRC-0	11	14
MRC-1	11	14
MRC-2	11	14
MRC-3	11	14
MRC-4	11	14
MRC-5	11	14
MRC-6	11	14
MRC-7	11	14
MRC-8	11	14
MRC-9	11	13
MRD-7	11	12
MRD-7L	11	12
MRD-8V	2	25
MRD-9V	2	25
MRE-0	2	26
MRE-1V	2	25
MRE-2V	2	25
MRE-3V	2	25
MRE-4M	2	27
MRE-5M	2	27
MRE-5V	2	30
MRE-6M	2	27
MRE-6V	2	30
MRE-7M	2	27
MRE-7V	2	30

Item no.	Cat. no.	Cat. page
MRE-8M	2	27
MRE-9M	2	27
MRF-0V	2	22
MRF-1V	11	23
MRF-1V	2	14
MRG-2	11	12
MRG-3T	11	13
MRG-4T	11	13
MRG-6	11	12
MRG-7	11	12
MRG-8	11	12
MRG-9	11	12
MRH-7	2	14
MRH-8	2	14
MRH-9	2	14
MRI-0	11	23
MRI-0L	2	23
MRI-0S	2	23
MRI-1	2	26
MRI-1M	2	27
MRI-2	2	26
MRI-2M	2	27
MRI-3	2	26
MRI-3M	2	27
MRI-4	2	26
MRI-4M	2	27
MRI-5	2	26
MRI-5M	2	27
MRI-6	2	26
MRI-6M	2	27
MRI-7	2	26
MRI-7M	2	27
MRI-8M	2	27
MRI-9M	2	27
MRJ-4	2	22
MRJ-5	2	14
MRJ-6	2	14
MRJ-7	2	14
MRJ-9V	11	21
MRK-1	4	18
MRK-2	4	18
MRK-3	4	18
MRK-5	11	16

Item no.	Cat. no.	Cat. page
MRK-6	11	16
MRK-9P	11	13
MRL-0	11	16
MRL-2	11	13
MRL-4	11	13
MRL-5	11	13
MRL-8	11	13
MRL-8L	11	13
MRM-0	11	14
MRM-5	11	3
MRM-5	2	7
MRM-6	11	3
MRM-6	2	7
MRM-7	11	11
MRM-8	11	11
MRM-9	11	11
MRN-0	11	12
MRN-0B	11	12
MRN-3	2	17
MRN-4	2	20
MRN-5	2	20
MRN-6	2	20
MRN-7	2	20
MRO-0	2	19
MRO-0V	2	19
MRO-2	2	20
MRO-3	2	20
MRO-4	2	20
MRO-5	2	20
MRO-6	2	20
MRO-7	2	18
MRO-7V	2	18
MRO-9	2	19
MRO-9V	2	19
MRP-1	2	18
MRP-1F	2	18
MRP-2	2	18
MRP-2F	2	18
MRP-2K	2	18
MRP-2V	2	18
MRP-3	2	18
MRP-3F	2	18
MRP-3K	2	18

Item no.	Cat. no.	Cat. page
MRP-3V	2	18
MRP-4	2	18
MRP-4F	2	18
MRP-4K	2	18
MRP-4V	2	18
MRP-5	2	22
MRP-5V	2	22
MRP-6	2	22
MRP-6V	2	22
MRQ-0	11	12
MRQ-1	11	13
MRQ-2	11	13
MRQ-3	11	12
MRQ-5	11	12
MRQ-7	2	18
MRQ-8	2	18
MRQ-9	2	18
MRR-1	2	19
MRR-1V	2	19
MRR-2	2	19
MRR-2L	2	19
MRR-2V	2	19
MRR-3V	2	13
MRR-5	2	21
MRR-6	2	21
MRT-2	11	12
MRT-3	11	12
MRT-5	11	12
MRT-6	11	12
MRU-1	2	17
MRU-2	2	17
MRU-3	2	17
MRU-4	2	17
MRU-5	2	17
MRU-6	2	21
MRU-8F	2	24
MRU-9	2	20
MRV-0F	2	24
MRV-0J	2	24
MRV-0R	2	24
MRV-1F	2	24
MRV-2H	2	16
MRV-2L	2	16

Item no.	Cat. no.	Cat. page
MRV-3H	2	16
MRV-3L	2	16
MRV-4H	2	16
MRV-4L	2	16
MRV-7	2	28
MRV-7V	2	28
MRV-8	2	28
MRV-8V	2	28
MRV-9F	2	24
MRW-0	11	23
MRW-1G	11	23
MRW-2G	11	23
MRW-3G	11	23
MRW-4G	11	23
MRW-5G	11	23
MRW-6	11	23
MRW-7	11	23
MRX-1V	2	21
MRX-2	2	20
MRX-3	2	20
MRX-5	2	21
MRX-6	2	21
MRY-1	2	8
MRY-2	2	8
MRY-3	2	8
MRY-3K	2	8
MRY-4	2	8
MRY-5	2	8
MRY-6	2	7
MRY-7	2	8
MRY-8	2	8
MRY-9	2	8
MSB-0	11	8
MSB-1	2	4
MSB-1	PC	5
MSB-2	2	4
MSB-2	PC	5
MSB-3	2	4
MSB-3	PC	5
MSB-4	2	4
MSB-4	PC	5
MSB-5	2	4
MSB-5	PC	5

Item no.	Cat. no.	Cat. page
MSB-6	2	4
MSB-6	PC	5
MSB-7	2	4
MSB-7	PC	5
MSB-8	2	9
MSC-8	2	8
MSC-9	2	8
MSD-0	2	8
MSD-1	2	34
MSD-2	2	34
MSD-3	2	34
MSD-5	2	26
MSD-5	PC	6
MSE-4	2	4
MSE-4	PC	6
MSE-5	2	4
MSE-5	PC	6
MSE-6	2	4
MSE-6	PC	6
MSE-9	2	4
MSE-9	PC	6
MSF-0	PC	12
MSF-1	PC	12
MSF-2	PC	12
MSF-3	PC	12
MSF-4	PC	12
MSF-5	PC	12
MSF-6	PC	12
MSF-7	PC	12
MSF-8	PC	12
MSF-9	PC	12
MSG-0	PC	12
MSG-1	PC	12
MSG-2	PC	12
MSG-3	PC	12
MSG-4	PC	12
MSG-5	PC	12
MSG-7	PC	12
MSG-8	PC	12
MSG-9	PC	12
MSH-0	PC	12
MSH-1	PC	12
MSH-2	PC	12

Item no.	Cat. no.	Cat. page
MSH-3	PC	12
MSH-4	PC	12
MSH-5	PC	12
MSH-6	PC	12
MSH-7	PC	12
MSH-8	PC	12
MSH-9	PC	12
MSJ-1	PC	12
MSJ-2	PC	12
MSJ-3	PC	12
MSN-2	2	20
MSN-3	2	20
MSO-1	11	12
MSO-3	11	12
MSO-4	11	12
MSO-6	11	12
MSO-8	11	12
MSS-1V	11	22
MSS-2V	11	22
MSS-3	11	22
MST-0	PC	13
MST-2	PC	13
MST-3	PC	13
MST-4	PC	13
MST-5	PC	13
MST-6	PC	13
MST-7	PC	13
MST-8	PC	13
MST-9	PC	13
MSU-0	PC	13
MSU-1	PC	13
MSU-2	PC	13
MSU-3	PC	13
MSU-4	PC	13
MSU-5	PC	13
MSU-6	PC	13
MSU-7	PC	13
MSU-8	PC	13
MSU-9	PC	13
MSX-1	2	5
MSX-1	PC	7
MSX-2	2	5
MSX-2	PC	7

Item no.	Cat. no.	Cat. page
MSX-3	2	5
MSX-3	PC	7
MSX-5A	2	5
MSX-5A	PC	7
MSX-5B	2	5
MSX-5B	PC	7
MSX-5C	2	5
MSX-5C	PC	7
MSX-6	2	6
MSX-6	PC	8
MSX-7	2	6
MSX-7	PC	8
MSX-8	2	6
MSX-8	PC	8
MSY-6	2	6
MSY-6	PC	8
MSY-7	2	6
MSY-7	PC	8
MSY-8	2	6
MSY-8	PC	8
MSY-9	2	6
MSY-9	PC	8
MSZ-6	2	6
MSZ-6	PC	8
MSZ-7	2	6
MSZ-7	PC	8
MSZ-8	2	6
MSZ-8	PC	8
MSZ-9	2	6
MSZ-9	PC	8
MTE-1	11	25
MTE-2	11	25
MTE-3	11	25
MTE-4	11	25
MTE-5	11	25
MTE-6	11	24
MTE-7	11	25
MTE-8	11	24
MTE-9	11	24
MTF-1	11	24
MTF-2	11	24
MTF-3	11	25
MTF-5	11	24

Item no.	Cat. no.	Cat. page
MTF-6	11	24
MTF-7	11	24
MTF-8	11	24
MTH-0	2	5
MTH-0	PC	7
MTH-1	2	5
MTH-1	PC	7
MTH-2	2	5
MTH-2	PC	7
MTH-3	2	6
MTH-3	PC	8
MTH-4	2	6
MTH-4	PC	8
MTH-5	2	6
MTH-5	PC	8
MTH-6	2	6
MTH-6	PC	8
MTH-7	2	6
MTH-7	PC	8
MTH-8	2	6
MTH-8	PC	8
MTI-0	11	3
MTI-1	11	21
MTI-2V	11	21
MTK-0	11	3
MTU-3	11	20
MVD-1	11	7
MVD-2	11	7
MVD-3	11	7
MVD-4	11	7
MVD-5	11	7
MVD-6	11	7
MVD-7	11	7
MVD-8	11	7
MVD-9	11	7
MVE-0	11	7
MVE-1	11	7
MVE-2	11	7
MVE-3	11	7
MVE-4	11	7
MVE-5	11	7
MVE-6	11	7
MVE-7	11	7

Item no.	Cat. no.	Cat. page
MVE-8	11	7
MVE-9	11	7
MZI-3	PC	11
MZI-5	2	27
MZZ-1N	2	24
MZZ-1Q	2	24
MZZ-2	2	24
NAT-7	8	7
NAT-8	8	7
NAT-9	8	7
NAU-1	8	7
NAU-2	8	7
NAY-7	10	6
NAY-8	10	6
NAY-9	10	6
NAZ-6	10	6
NAZ-7	10	6
NAZ-8	10	6
NAZ-9	10	6
NBA-1	10	6
NBA-2	10	6
NBA-8	10	7
NBA-9	10	7
NBB-1	10	7
NBB-4	10	6
NBB-5	10	6
NBB-6	10	6
NBB-7	10	6
NBB-8	10	7
NBB-9	10	7
NBC-1	10	7
NBC-2	10	7
NBC-3	10	6
NBC-4	10	6
NBC-5	10	6
NBC-6	10	6
NBC-7	10	6
NBC-8	10	6
NBC-9	10	6
NBD-1	10	6
NBD-2	10	6
NBH-8	10	7
NBH-9	10	7

Item no.	Cat. no.	Cat. page
NBJ-1	10	7
NBJ-3	10	7
NBJ-5	10	7
NBJ-6	10	6
NBJ-7	10	7
NBJ-9	10	7
NBK-1	10	7
NBK-3	10	7
NBK-4	10	7
NBK-6	10	7
NBK-7	10	6
NBK-8	10	7
NBL-2	10	6
NBP-4	10	5
NBP-5	10	5
NBP-6	10	5
NBR-3	10	10
NBR-4	10	10
NBR-5	10	10
NBR-6	10	10
NBR-7	10	10
NBR-8	10	10
NBR-9	10	10
NBS-1	10	10
NBS-2	10	10
NBS-3	10	10
NBS-4	10	10
NBS-5	10	10
NBX-4	10	5
NCL-4	2	56
NCL-5	2	56
NCL-6	2	56
NCL-7	2	56
NCL-8	2	56
NCL-9	2	56
NCM-1	2	56
NDH-0	2	54
NDH-1	2	54
NDH-2	2	57
NDH-3	2	57
NDH-4	2	57
NDI-1	2	54
NDI-2	2	54

Item no.	Cat. no.	Cat. page
NDI-3	2	54
NDI-4	2	54
NDI-9	2	54
NDJ-0	2	54
NDM-1	2	49
NDM-2	2	49
NDM-3	2	49
NDM-4	2	49
NDM-5	2	49
NDM-6	2	49
NDM-7	2	49
NDM-8	2	49
NDN-4	10	15
NDN-6	10	15
NDN-9	10	15
NDO-0	10	15
NDO-1	10	15
NDP-1	2	49
NDP-2	2	49
NDP-3	2	49
NDP-4	2	49
NDP-5	2	49
NDP-6	2	49
NDQ-6	2	50
NDQ-7	2	50
NDQ-8	2	50
NDQ-9	2	50
NDW-2	2	57
NDW-3	2	57
NDW-4	2	57
NEA-2	10	14
NEG-6	2	56
NEH-0	2	57
NEH-1	2	57
NEH-2	2	57
NEH-3	2	57
NEH-4	2	57
NEV-1	6	19
NEW-4	10	5
NFR-7	2	56
NGG-4	8	6
NGG-5	8	8
NGG-6	8	6

Item no.	Cat. no.	Cat. page
NGG-7	8	6
NGM-6	2	39
NGM-7K	2	47
NGM-8K	2	47
NGN-0	2	47
NGN-5	2	46
NGS-6	8	6
NGT-0	8	6
NHA-8	8	8
NHK-9	2	40
NHL-1	2	40
NHR-0	8	8
NHR-4	8	8
NHR-8	8	7
NHR-9	8	7
NHS-0	8	7
NHS-1	8	7
NHS-2	8	7
NHX-0	7	14
NHY-0	2	57
NHY-5	2	57
NHY-9	2	57
NIB-0	10	9
NIB-0	4	12
NIB-4	10	9
NIB-4	4	12
NIB-6	10	9
NIB-6	4	12
NIB-9	10	9
NIB-9	4	12
NIC-5	10	11
NIE-1	2	40
NIE-2	2	40
NIE-4	2	42
NIE-5	2	42
NIE-6	2	42
NIE-7	2	42
NIE-8	2	42
NIE-9	2	42
NIF-0	2	42
NIF-2	2	42
NIF-3	2	42
NIF-4	2	42

Item no.	Cat. no.	Cat. page
NIF-5	2	42
NIF-6	2	42
NIF-7	2	42
NIF-8	2	42
NIG-1	2	40
NIG-2	2	42
NIG-3	2	42
NIG-4	2	42
NII-1	2	44
NII-3	2	44
NII-4	2	44
NII-5	2	44
NII-6	2	44
NII-7	2	44
NII-8	2	44
NIJ-1	2	44
NIJ-2	2	44
NIJ-3	2	44
NIJ-4	2	44
NIJ-5	2	44
NIJ-6	2	44
NIJ-7	2	44
NIJ-8	2	44
NIK-2	2	44
NIK-3	2	44
NIK-4	2	44
NIK-5	2	44
NIK-6	2	44
NIK-7	2	44
NIM-1	2	44
NIM-2	2	44
NIM-3	2	44
NIM-4	2	44
NIM-5	2	44
NIM-6	2	44
NIM-7	2	44
NIM-9	2	44
NIN-1	2	43
NIN-2	2	43
NIN-3K	2	43
NKA-1	6	20
NKA-2	6	20
NKA-3	6	20

Item no.	Cat. no.	Cat. page
NKA-4	6	20
NKA-5	6	20
NKA-6	6	20
NKA-7	6	20
NKA-8	6	21
NKA-9	6	21
NKB-0	6	21
NKB-1	6	21
NKB-2	6	21
NKB-3	6	21
NKB-4	6	21
NKB-5	6	21
NKB-6	6	21
NKB-7	6	21
NKB-8	6	22
NKC-1	6	22
NKC-2	6	22
NKC-3	6	22
NKC-4	6	22
NKC-7	6	22
NKC-8	6	22
NKC-9	6	22
NKD-0	6	23
NKD-1	6	23
NKD-2	6	23
NKD-3	6	23
NKD-4	6	23
NKD-5	6	23
NKD-6	6	23
NKD-7	6	23
NKD-8	6	23
NKD-9	6	23
NKF-6	6	23
NKF-7	6	23
NKF-8	6	23
NKF-9	6	23
NKK-1	6	24
NKK-2	6	24
NKK-3	6	24
NKK-4	6	24
NKK-5	6	24
NKK-6	6	23
NKL-8	6	20

Item no.	Cat. no.	Cat. page
NKR-1	6	15
NKR-1X	6	15
NKR-2	6	15
NKR-2X	6	15
NKR-3	6	15
NKR-3X	6	15
NKR-4	6	15
NKR-4X	6	15
NLA-1	6	19
NLA-2	6	19
NLA-3	6	19
NLA-4	6	19
NLA-5	6	19
NLA-6	6	19
NLA-7	6	19
NLA-8	6	19
NLB-1	6	19
NLB-2	6	19
NLB-3	6	19
NLB-4	6	19
NLB-5	6	19
NLB-6	6	19
NLB-7	6	19
NLB-8	6	19
NLC-1	6	19
NLC-2	6	19
NLC-3	6	19
NLC-4	6	19
NLC-5	6	19
NLC-6	6	19
NLC-7	6	19
NLC-8	6	19
NLD-1	6	19
NLD-2	6	19
NLD-3	6	19
NLD-4	6	19
NLD-5	6	19
NLD-6	6	19
NLD-7	6	19
NLD-8	6	19
NLE-1	6	19
NLE-2	6	19
NLE-3	6	19

Item no.	Cat. no.	Cat. page
NLE-4	6	19
NLF-0S	6	10
NLF-1S	6	10
NLF-2S	6	10
NLF-3S	6	10
NLF-4S	6	10
NLF-5S	6	10
NLF-6S	6	10
NLF-7S	6	10
NLF-8S	6	10
NLF-9S	6	10
NLG-1S	6	10
NLG-2S	6	10
NLG-3S	6	10
NLG-4S	6	10
NLG-5S	6	10
NLG-6S	6	10
NLG-7S	6	10
NLG-8S	6	10
NLH-1S	6	10
NLH-2S	6	10
NLH-3S	6	10
NLH-4S	6	10
NLH-5S	6	10
NLH-6S	6	10
NLH-7S	6	10
NLH-8S	6	10
NLN-6	6	14
NLN-6X	6	14
NLN-7	6	14
NLN-7X	6	14
NLN-8	6	14
NLN-8X	6	14
NLN-9	6	14
NLN-9X	6	14
NLO-0	6	14
NLO-2	6	14
NLO-2X	6	14
NLO-3	6	14
NLO-3X	6	14
NLO-4	6	14
NLO-4X	6	14
NLO-5	6	14

Item no.	Cat. no.	Cat. page
NLO-5X	6	14
NLO-6	6	14
NLO-6X	6	14
NLO-7	6	14
NLO-7X	6	14
NLO-8	6	14
NLO-8X	6	14
NLO-9	6	14
NLO-9X	6	14
NLP-1	6	17
NLT-2	11	8
NLT-2	6	14
NLT-2X	6	14
NLT-3	11	8
NLT-3	6	14
NLT-3X	6	14
NLT-4	11	8
NLT-4	6	14
NLT-4X	6	14
NLT-5	11	8
NLT-5	6	14
NLT-5X	6	14
NLT-6	11	8
NLT-6	6	14
NLT-6X	6	14
NLT-7	11	8
NLT-7	6	14
NLT-7X	6	14
NLT-8	11	8
NLT-8	6	14
NLT-8X	6	14
NLU-2	11	8
NLU-2	6	14
NLU-2X	6	14
NLU-3	11	8
NLU-3	6	14
NLU-3X	6	14
NLU-4	11	8
NLU-4	6	14
NLU-4X	6	14
NLU-5	11	8
NLU-5	6	14
NLU-5X	6	14

Item no.	Cat. no.	Cat. page
NLU-6	11	8
NLU-6	6	14
NLU-6X	6	14
NLU-7	11	8
NLU-7	6	14
NLU-7X	6	14
NLU-8	11	8
NLU-8	6	14
NLU-8X	6	14
NLU-9	11	8
NLU-9	6	14
NLU-9X	6	14
NLV-2	6	14
NLV-2X	6	14
NLV-3	6	14
NLV-3X	6	14
NLV-4	6	14
NLV-4X	6	14
NLV-5	6	14
NLV-5X	6	14
NLV-6	6	14
NLV-6X	6	14
NLV-7	6	14
NLV-7X	6	14
NLV-8	6	14
NLV-8X	6	14
NLV-9	6	14
NLV-9X	6	14
NLW-0	6	14
NLW-0X	6	14
NLW-2	6	14
NLW-2X	6	14
NLW-3	6	14
NLW-3X	6	14
NLW-4	6	14
NLW-4X	6	14
NLW-5	6	14
NLW-5X	6	14
NLW-6	6	14
NLW-6X	6	14
NLW-7	6	14
NLX-2	6	14
NLX-2X	6	14

Item no.	Cat. no.	Cat. page
NLX-3	6	14
NLX-3X	6	14
NLX-4	6	14
NLX-4X	6	14
NLX-5	6	14
NLX-5X	6	14
NLX-6	6	14
NLX-6X	6	14
NLX-7	6	14
NLX-8	6	14
NLX-8X	6	14
NLX-9	6	14
NLX-9X	6	14
NLZ-9	11	8
NLZ-9	6	14
NLZ-9X	6	14
NMA-2	6	18
NMA-3	6	18
NMA-4	6	18
NMA-5	6	18
NMA-6	6	18
NMB-2	6	18
NMB-3	6	18
NMB-4	6	18
NMB-5	6	18
NMB-6	6	18
NMC-2	6	18
NMC-3	6	18
NMC-4	6	18
NMC-5	6	18
NMC-6	6	18
NMD-2	6	18
NMD-3	6	18
NMD-4	6	18
NMD-5	6	18
NMD-6	6	18
NME-2	6	18
NME-3	6	18
NME-4	6	18
NME-5	6	18
NME-6	6	18
NMF-2	6	18
NMF-3	6	18

Item no.	Cat. no.	Cat. page
NMF-4	6	18
NMF-5	6	18
NMF-6	6	18
NMG-0	6	18
NMG-1	6	18
NMG-2	6	18
NMG-3	6	18
NMG-4	6	18
NMG-5	6	18
NMG-6	6	18
NMG-7	6	18
NMG-8	6	18
NMG-9	6	18
NMH-0	6	18
NMH-1	6	18
NMH-2	6	18
NMH-3	6	18
NMH-4	6	18
NMH-5	6	18
NMH-6	6	18
NMH-7	6	18
NMH-8	6	18
NMH-9	6	18
NMI-0	6	18
NMI-1	6	18
NMI-2	6	18
NMI-3	6	18
NMI-4	6	18
NMI-5	6	18
NMI-6	6	18
NMI-7	6	18
NMI-8	6	18
NMI-9	6	18
NMJ-2	6	17
NMJ-3	6	17
NMJ-4	6	17
NMJ-5	6	17
NMJ-8X	6	14
NMJ-9X	6	14
NMK-0X	6	14
NMK-2	6	17
NMK-3	6	17
NMK-4	6	17

Item no.	Cat. no.	Cat. page
NMK-5	6	17
NMK-6	6	17
NMK-7	6	17
NMK-8	6	17
NMK-9	6	17
NML-2	6	17
NML-3	6	17
NML-4	6	17
NML-5	6	17
NMM-1	6	17
NMM-2	6	17
NMM-3	6	17
NMM-4	6	17
NMM-5	6	17
NMN-0	6	17
NMN-1	6	17
NMN-2	6	17
NMN-3	6	17
NMN-4	6	17
NMN-5	6	17
NMO-1	6	17
NMO-2	6	17
NMO-3	6	17
NMO-4	6	17
NMO-5	6	17
NMP-2	6	17
NMP-3	6	17
NMP-4	6	17
NMP-5	6	17
NMQ-2	6	17
NMQ-3	6	17
NMQ-4	6	17
NMQ-5	6	17
NMR-2	6	17
NMR-3	6	17
NMR-4	6	17
NMR-5	6	17
NMT-6	6	17
NMT-7	6	17
NMT-8	6	17
NMT-9	6	17
NMU-1	6	17
NMU-2	6	17

Item no.	Cat. no.	Cat. page
NMU-3	6	17
NMU-4	6	17
NMU-5	6	17
NMU-8	6	17
NMU-9	6	17
NMW-1	6	17
NMW-2	6	17
NMW-3	6	17
NMW-4	6	17
NMW-5	6	17
NMW-6	6	17
NMW-7	6	17
NMW-8	6	17
NMW-9	6	17
NNB-9X	6	4
NND-2	6	11
NND-3	6	11
NND-4	6	11
NND-5	6	11
NND-6X	6	5
NND-7X	6	5
NND-8X	6	5
NND-9X	6	5
NNE-0X	6	4
NNE-2X	6	4
NNE-3X	6	4
NNE-4X	6	4
NNE-5X	6	4
NNE-6X	6	4
NNE-7X	6	4
NNE-8X	6	4
NNE-9X	6	4
NNF-6X	6	4
NNF-7X	6	4
NNF-8X	6	4
NNF-9X	6	4
NNG-0X	6	4
NNG-1X	6	4
NNG-7X	6	4
NNG-8X	6	4
NNG-9X	6	4
NNH-0X	6	4
NNJ-9X	6	5

Item no.	Cat. no.	Cat. page
NNK-0X	6	5
NNK-1X	6	5
NNK-2X	6	4
NNK-3X	6	4
NNK-4X	6	4
NNK-5X	6	4
NNK-8X	6	5
NNK-9X	6	5
NNL-0X	6	5
NNL-1X	6	5
NNL-2X	6	4
NNL-3X	6	4
NNL-4X	6	4
NNL-5X	6	4
NNL-6X	6	5
NNL-7X	6	4
NNL-8X	6	4
NNL-9X	6	4
NNN-0X	6	4
NNN-1X	6	4
NNN-2X	6	4
NNN-3X	6	4
NNN-4X	6	4
NNN-5X	6	4
NNN-6X	6	4
NNN-7X	6	4
NNN-8X	6	4
NNN-9X	6	4
NNO-0X	6	5
NNO-1X	6	5
NNO-2X	6	5
NNO-3X	6	5
NNO-4X	6	5
NNO-5X	6	5
NNO-6X	6	5
NNO-7X	6	5
NNO-8X	6	5
NNO-9X	6	5
NNQ-0X	6	5
NNQ-1X	6	5
NNQ-2X	6	5
NNQ-3X	6	5
NNQ-6X	6	5

Item no.	Cat. no.	Cat. page
NNQ-9X	6	4
NNR-0D	6	12
NNR-0X	6	5
NNR-1	6	11
NNR-2	6	11
NNR-3	6	11
NNR-4	6	11
NNR-5	6	11
NNR-6	6	11
NNR-7	6	11
NNR-8	6	11
NNR-9	6	11
NNT-6X	6	5
NNT-7X	6	5
NNT-8X	6	5
NNT-9X	6	5
NNU-0X	6	10
NNU-1X	6	10
NNU-2X	6	10
NNU-3X	6	10
NNU-4X	6	10
NNU-5X	6	10
NNU-6X	6	10
NNU-7X	6	10
NNU-8X	6	10
NNU-9X	6	10
NNV-5X	6	4
NNV-6X	6	4
NNV-7X	6	4
NNV-8X	6	4
NNV-9X	6	4
NNW-2X	6	5
NNW-3X	6	5
NNW-4X	6	5
NNW-5X	6	5
NNX-0X	6	5
NNX-4X	6	10
NNX-5X	6	4
NNX-6X	6	4
NNX-7X	6	4
NNX-8X	6	4
NNX-9X	6	4
NNY-0X	6	4

Item no.	Cat. no.	Cat. page
NNY-2X	6	4
NNY-3X	6	4
NNY-4X	6	4
NNY-5X	6	4
NNY-6X	6	4
NNZ-8X	6	4
NOI-9	10	10
NOJ-1	10	10
NOJ-2	10	10
NOJ-3	10	10
NOJ-4	10	10
NOJ-5	10	10
NOJ-6	10	10
NOJ-7	10	10
NOJ-8	10	10
NOJ-9	10	10
NOK-0	10	10
NOK-8	10	10
NOL-7	10	10
NOL-8	10	10
NOL-9	10	10
NOM-0	10	10
NOP-1K	7	5
NOP-2K	7	5
NOP-3K	7	5
NOP-4K	7	5
NOP-5K	7	5
NOP-6K	7	5
NOP-7K	7	5
NOP-8K	7	5
NOR-1K	7	4
NOR-2K	7	4
NOR-3K	7	4
NOR-4K	7	4
NOR-6K	7	4
NOR-7K	7	4
NOV-8	2	57
NOV-9	2	57
NOW-1	2	57
NOW-2	2	57
NOW-3	2	57
NOW-7K	7	4
NOW-8K	7	4

Item no.	Cat. no.	Cat. page
NOW-9K	7	4
NOX-1K	7	4
NOX-2K	7	4
NOX-3K	7	4
NOX-4K	7	4
NOX-5K	7	4
NOX-6K	7	4
NOX-7K	7	4
NOX-8K	7	4
NOY-1K	7	5
NOY-2K	7	5
NOY-3K	7	5
NOY-4K	7	5
NOY-5K	7	5
NOY-6K	7	5
NOY-7K	7	5
NOY-8K	7	5
NPA-1K	7	8
NPA-2K	7	8
NPA-3K	7	8
NPA-4K	7	8
NPA-6K	7	16
NPA-7K	7	16
NPA-8K	7	16
NPB-1K	7	8
NPB-2K	7	8
NPB-3K	7	8
NPB-4K	7	8
NPB-6K	7	16
NPB-7K	7	16
NPB-8K	7	16
NPC-1K	7	4
NPC-2K	7	4
NPC-3K	7	4
NPC-4K	7	4
NPC-5K	7	4
NPC-6K	7	4
NPC-7K	7	3
NPC-8K	7	4
NPD-1K	7	4
NPD-2K	7	4
NPD-3K	7	4
NPD-4K	7	4

Item no.	Cat. no.	Cat. page
NPD-5K	7	4
NPD-6K	7	4
NPD-7K	7	4
NPD-8K	7	4
NPE-1K	7	5
NPE-2K	7	5
NPE-3K	7	5
NPE-4K	7	5
NPE-5K	7	5
NPE-6K	7	5
NPE-7K	7	5
NPE-8K	7	5
NPF-1K	7	2
NPF-2K	7	2
NPF-3K	7	2
NPF-4K	7	2
NPF-5K	7	2
NPF-6K	7	16
NPF-7K	7	16
NPF-8K	7	16
NPG-1K	7	2
NPG-2K	7	2
NPG-3K	7	2
NPG-4K	7	2
NPG-5K	7	2
NPH-1K	7	3
NPH-2K	7	3
NPH-3K	7	3
NPH-4K	7	3
NPH-5K	7	3
NPH-6K	7	3
NPH-7K	7	3
NPI-1K	7	3
NPI-2K	7	3
NPI-3K	7	3
NPI-4K	7	3
NPI-5K	7	3
NPI-6K	7	3
NPI-7K	7	3
NPJ-0K	7	12
NPJ-1K	7	12
NPJ-2K	7	12
NPK-0K	7	12

Item no.	Cat. no.	Cat. page
NPK-1K	7	12
NPK-2K	7	12
NPK-3K	7	12
NPK-4K	7	12
NPK-5K	7	12
NPK-6K	7	12
NPK-7K	7	12
NPK-8K	7	12
NPK-9K	7	12
NPM-0K	7	9
NPM-1K	7	9
NPM-2K	7	9
NPM-3K	7	9
NPM-4K	7	9
NPM-5K	7	9
NPM-6K	7	9
NPM-7K	7	9
NPM-8K	7	9
NPM-9K	7	9
NPN-0K	7	9
NPN-1K	7	9
NPN-2K	7	9
NPN-3K	7	9
NPN-4K	7	9
NPN-5K	7	9
NPN-7K	7	9
NPN-8K	7	9
NPN-9K	7	9
NPO-9K	7	12
NPP-1	7	6
NPP-2	7	6
NPP-3	7	6
NPP-4	7	6
NPP-5	7	6
NPP-6	7	6
NPP-7	7	6
NPP-8	7	6
NPP-9	7	6
NPQ-1	7	6
NPR-4K	7	9
NPR-5K	7	9
NPR-6K	7	9
NPR-7K	7	9

Item no.	Cat. no.	Cat. page
NPR-8K	7	9
NPR-9K	7	9
NPS-4K	7	9
NPS-5K	7	9
NPS-6K	7	9
NPY-1	7	6
NPY-2	7	6
NPY-3	7	6
NPY-4	7	6
NPY-5	7	6
NPY-6	7	6
NRA-1K	7	18
NRA-2K	7	18
NRA-4K	7	18
NRA-5K	7	18
NRB-5K	7	8
NRB-6K	7	8
NRB-7K	7	8
NRB-8K	7	8
NRC-5K	7	8
NRC-6K	7	8
NRC-7K	7	8
NRC-8K	7	8
NRD-0	7	11
NRD-1	7	11
NRD-2	7	11
NRD-3	7	11
NRD-4	7	11
NRD-5	7	11
NRD-6	7	11
NRD-7	7	11
NRD-8	7	11
NRE-1K	7	8
NRE-2K	7	8
NRE-3K	7	8
NRE-4K	7	8
NRE-5K	7	8
NRE-6K	7	8
NRE-7K	7	8
NRE-8K	7	8
NRF-1K	7	8
NRF-2K	7	8
NRF-3K	7	8

Item no.	Cat. no.	Cat. page
NRF-4K	7	8
NRF-5K	7	8
NRF-6K	7	8
NRF-7K	7	8
NRF-8K	7	8
NRG-0	7	11
NRG-1	7	11
NRG-2	7	11
NRG-3	7	11
NRG-4	7	11
NRG-5	7	11
NRG-6	7	11
NRG-8	7	11
NRG-9	7	11
NRH-1	7	14
NRH-3	7	14
NRH-4	7	14
NRI-0K	7	15
NRI-1K	7	15
NRI-2K	7	15
NRI-3K	7	15
NRI-4K	7	15
NRI-5K	7	15
NRI-6K	7	15
NRK-1	7	18
NRK-2	7	18
NRK-5	7	13
NRK-6	7	13
NRN-1K	7	8
NRN-2K	7	8
NRN-3K	7	10
NRN-5K	7	3
NRN-7K	7	12
NRO-1K	7	19
NRO-2K	7	19
NRO-3K	7	19
NRO-4K	7	19
NRO-8K	7	19
NRP-1K	7	10
NRP-2K	7	10
NRP-3K	7	10
NRP-4K	7	10
NRP-5K	7	10

Item no.	Cat. no.	Cat. page
NRP-6K	7	10
NRP-7K	7	10
NRQ-8	7	11
NRQ-9	7	11
NRR-0	7	11
NRR-1	7	11
NRR-2	7	11
NRR-3	7	11
NRR-4	7	11
NRR-5	7	11
NRR-6	7	11
NRR-7	7	11
NRR-8	7	11
NRR-9	7	11
NRU-1K	7	8
NRU-2K	7	8
NRU-3K	7	8
NRU-4K	7	8
NRU-5K	7	8
NRU-6K	7	8
NRU-7K	7	8
NRU-8K	7	8
NRV-0K	7	9
NRV-1K	7	9
NRV-2K	7	9
NRV-3K	7	9
NRV-4K	7	9
NRV-5K	7	9
NRV-6K	7	9
NRV-7K	7	9
NRV-8K	7	9
NRV-9K	7	9
NRW-1K	7	8
NRW-2K	7	8
NRW-3K	7	8
NRW-4K	7	8
NRW-5K	7	8
NRW-6K	7	8
NRX-1K	7	8
NRX-2K	7	8
NRX-3K	7	8
NRX-4K	7	8
NRX-5K	7	8

Item no.	Cat. no.	Cat. page
NRX-6K	7	8
NRX-7K	7	8
NRX-8K	7	8
NSA-1V	2	39
NSA-2V	2	39
NSA-3V	2	39
NSA-5	2	39
NSB-0	2	41
NSB-1	2	41
NSB-2	2	41
NSB-3	2	41
NSB-4	2	41
NSB-5	2	41
NSB-6	2	41
NSB-7	2	41
NSC-2	2	42
NSC-3	2	42
NSC-4	2	42
NSC-5	2	42
NSC-8	2	42
NSC-9	2	42
NSF-0	2	41
NSF-1	2	41
NSF-2	2	41
NSF-3	2	41
NSF-4	2	41
NSF-5	2	41
NSF-6	2	41
NSF-7	2	41
NSF-8	2	41
NSG-0	2	42
NSG-1	2	42
NSG-2	2	42
NSG-3	2	42
NSG-4	2	42
NSG-5	2	42
NSG-6	2	42
NSG-7	2	42
NSG-9	2	41
NSH-0	2	41
NSH-1	2	41
NSH-2	2	41
NSH-3	2	41

Item no.	Cat. no.	Cat. page
NSH-4	2	41
NSH-5	2	41
NSH-6	2	41
NSH-7	2	41
NSH-8	2	41
NSH-9	2	41
NSI-0	2	42
NSI-1	2	42
NSI-2	2	42
NSI-3	2	42
NSI-4	2	42
NSI-5	2	42
NSI-6	2	42
NSI-7	2	42
NSI-8	2	42
NSK-0	2	42
NSK-5	2	42
NSK-8	2	41
NSL-0	2	41
NSL-1	2	41
NSL-2	2	41
NSL-4	2	41
NSL-8	2	41
NSM-0	2	41
NSM-1	2	41
NSM-2	2	41
NSM-3	2	41
NSM-4	2	41
NSM-5	2	41
NSM-6	2	41
NSM-7	2	41
NSM-8	2	41
NSM-9	2	41
NSN-0	2	41
NSN-1	2	41
NSN-2	2	41
NSN-3	2	41
NSN-4	2	41
NSN-5	2	41
NSN-6	2	41
NSN-7	2	41
NSN-8	2	41
NSN-9	2	41

Item no.	Cat. no.	Cat. page
NSO-0	2	41
NSO-1	2	41
NSO-4	2	41
NSO-5	2	41
NSO-6	2	41
NSO-7	2	41
NSO-8	2	41
NSO-9	2	41
NSP-0	2	41
NSP-2	2	41
NSP-3	2	41
NSP-4	2	41
NSP-6	2	41
NSP-7	2	41
NSP-8	2	41
NSP-9	2	41
NSQ-0	2	41
NSQ-8	2	41
NSQ-9	2	41
NSR-1	2	42
NSR-2	2	42
NSR-3	2	42
NSR-6	2	42
NSR-7	2	42
NSR-8	2	41
NSR-9	2	41
NSS-0	2	41
NSS-6	2	41
NSS-7	2	41
NSS-8	2	41
NSS-9	2	41
NST-0	2	41
NST-1	2	41
NST-2	2	41
NST-3	2	41
NST-4	2	41
NST-5	2	41
NST-6	2	41
NST-7	2	41
NST-8	2	41
NST-9	2	41
NSU-9	2	41
NSX-0	2	39

Item no.	Cat. no.	Cat. page
NTC-1	10	5
NTC-2	10	5
NTC-3	10	5
NTC-4	10	5
NTC-5	10	5
NTC-6	10	5
NTC-7	10	5
NTC-8	10	5
NTC-9	10	5
NTD-1	10	5
NTD-2	10	5
NTD-3	10	5
NTD-4	10	5
NTD-5	10	5
NTD-6	10	5
NTF-1	10	10
NTF-2	10	10
NTF-3	10	10
NTF-4	10	10
NTF-5	10	10
NTF-6	10	10
NTF-7	10	10
NTF-8	10	10
NTF-9	10	10
NTG-0	10	10
NTH-7X	6	5
NTI-0X	6	4
NTI-1X	6	4
NTI-2X	6	5
NTM-1	7	20
NTR-9	2	55
NTS-0	2	55
NTS-1	2	55
NTS-2	2	55
NTS-3	2	55
NTS-4	2	55
NTS-5	2	55
NTS-6	2	55
NTS-7	2	55
NTS-8	2	55
NTS-9	2	55
NTT-0	2	55
NTT-1	2	55

Item no.	Cat. no.	Cat. page
NTT-2	2	55
NTT-3	2	55
NTT-4	2	55
NTT-5	2	55
NTT-6	2	55
NTT-7	2	55
NTT-8	2	55
NTT-9	2	55
NTU-0	2	55
NTU-1	2	55
NTU-2	2	55
NTU-3	2	55
NTV-0	2	55
NTV-1	2	55
NTV-2	2	55
NTV-3	2	55
NUA-1K	7	17
NUA-2K	7	17
NUA-3K	7	17
NUA-4K	7	17
NUA-5K	7	17
NUA-6K	7	17
NUA-7K	7	17
NUA-8K	7	17
NUB-1K	7	17
NUB-2K	7	17
NUB-3K	7	17
NUB-4K	7	17
NUB-5K	7	17
NUB-6K	7	17
NUB-7K	7	17
NUB-8K	7	17
NUB-9K	7	17
NUC-1K	7	18
NUC-2K	7	18
NUC-3K	7	18
NUC-4K	7	18
NUC-5K	7	18
NUC-6K	7	18
NUC-7K	7	18
NUC-8K	7	18
NUL-1	10	4
NUL-2	10	4

Item no.	Cat. no.	Cat. page
NUM-0	10	2
NUM-1	10	2
NUM-2	10	2
NUM-3	10	2
NUM-4	10	2
NUM-5	10	2
NUM-6	10	2
NUM-7	10	2
NUM-8	10	2
NUM-9	10	2
NUN-1	10	3
NUN-2	10	3
NUN-3	10	3
NUN-4	10	3
NUN-5	10	3
NUN-6	10	3
NUN-7	10	3
NUN-8	10	3
NUN-9	10	3
NUO-1	10	3
NUO-2	10	2
NUO-3	10	3
NUO-4	10	3
NUO-5	10	3
NUO-6	10	3
NUO-7	10	4
NUO-7	2	54
NUO-8	10	4
NUO-8	2	54
NUP-1	10	3
NUP-2	10	3
NUP-3	10	4
NUP-4	10	3
NUP-5	10	3
NUP-6	10	3
NUP-7	10	3
NUP-8	10	3
NUP-9	10	3
NUR-0	10	4
NUR-1	10	2
NUR-2	10	2
NUR-3	10	2
NUR-4	10	2

Item no.	Cat. no.	Cat. page
NUR-5	10	2
NUR-6	10	2
NUS-0	10	3
NUS-1	10	3
NUS-2	10	3
NUS-3	10	3
NUS-4	10	4
NUS-5	10	4
NUS-6	10	4
NUS-7	10	4
NUS-8	10	4
NUS-9	10	3
NUT-0	10	3
NUT-1	10	4
NUT-2	10	4
NUT-3	10	4
NUT-4	10	3
NUT-5	10	3
NUT-7	10	4
NUT-8	10	4
NUX-1	10	4
NUX-1	7	18
NUX-2	10	4
NUX-2	7	18
NUX-3	10	4
NUX-3	7	18
NUX-5	2	58
NUX-6	2	58
NUZ-5X	6	10
NUZ-6X	6	10
NUZ-7X	6	10
NUZ-9X	6	10
NVA-5X	6	10
NVA-8X	6	10
NVA-9X	6	10
NVB-7X	6	4
NVC-0X	6	4
NVC-2	6	11
NVC-3	6	11
NVC-4	6	11
NVC-5	6	11
NVD-0X	6	10
NVD-1X	6	10

Item no.	Cat. no.	Cat. page
NVD-2	6	11
NVD-3	6	11
NVD-4	6	11
NVD-5	6	11
NVD-6X	6	10
NVE-2	6	11
NVE-3	6	11
NVE-4	6	11
NVE-5	6	11
NVE-8X	6	5
NVF-2X	6	5
NVF-3X	6	5
NVF-4X	6	5
NVF-7X	6	5
NVF-8X	6	5
NVF-9X	6	5
NVG-1V	10	16
NVG-2V	10	16
NVG-3V	10	16
NVG-4V	10	16
NVG-5V	10	16
NVG-9	10	16
NVG-9	11	19
NVG-9	2	46
NVG-9L	2	46
NVH-0V	2	52
NVH-1V	2	51
NVH-2V	2	51
NVH-3V	2	51
NVH-4V	2	51
NVH-5V	2	51
NVH-6V	2	51
NVH-9V	2	51
NVI-0V	2	51
NVI-1V	2	51
NVI-2V	2	51
NVI-3V	2	51
NVI-4V	2	51
NVI-5V	2	51
NVI-6V	2	51
NVI-7V	2	51
NVI-8V	2	51
NVJ-0	2	51

Item no.	Cat. no.	Cat. page
NVJ-7	2	51
NVJ-8	2	51
NVK-5V	2	51
NVK-6V	2	51
NVK-9	2	51
NVL-1V	10	16
NVL-2V	10	16
NVL-3V	10	16
NVL-4V	10	16
NVL-5V	10	16
NVM-0	10	2
NVM-1	10	2
NVM-2	10	2
NVM-3	10	2
NVM-4	10	2
NVM-5	10	2
NVM-6	10	2
NVM-7	10	2
NVM-8	10	2
NVM-9	10	2
NVN-1	10	3
NVN-2	10	3
NVN-3	10	3
NVN-4	10	3
NVN-5	10	3
NVN-6	10	3
NVN-7	10	3
NVN-8	10	3
NVN-9	10	3
NVO-1	10	3
NVO-2	10	3
NVO-3	10	3
NVO-4	10	3
NVO-5	10	3
NVO-6	10	3
NVP-1	10	3
NVP-2	10	3
NVP-3	10	4
NVP-4	10	3
NVP-5	10	3
NVP-6	10	3
NVP-7	10	3
NVP-8	10	3

Item no.	Cat. no.	Cat. page
NVP-9	10	3
NVR-1	10	2
NVR-2	10	2
NVR-3	10	2
NVR-4	10	2
NVR-5	10	2
NVR-6	10	2
NVS-0	10	3
NVS-1	10	3
NVS-2	10	3
NVS-3	10	3
NVS-4	10	4
NVS-6	10	4
NVS-7	10	4
NVS-8	10	4
NVS-9	10	3
NVT-1	10	4
NVT-2	10	4
NVT-3	10	4
NVT-4	10	3
NVT-5	10	3
NVU-0X	6	5
NVW-0	2	51
NVW-1	2	51
NVW-2	2	51
NVW-3	2	51
NVW-4	2	51
NVW-5	2	51
NVW-6	2	51
NVW-7	2	51
NVZ-0X	6	10
NVZ-1X	6	10
NVZ-2X	6	10
NVZ-3X	6	10
NVZ-4X	6	10
NVZ-5X	6	10
NVZ-6X	6	10
NVZ-7X	6	10
NVZ-8X	6	10
NVZ-9X	6	10
NWA-0	2	54
NWA-1A	2	53
NWA-1B	2	45

Item no.	Cat. no.	Cat. page
NWA-1C	2	45
NWA-2	2	54
NWA-3	2	54
NWA-4	2	54
NWB-1	2	54
NWB-2	2	54
NWB-3	2	54
NWB-4	2	54
NWB-5	2	54
NWB-6	2	54
NWB-7	2	54
NWB-8	2	54
NWC-1	2	54
NWC-2	2	54
NWC-3	2	54
NWC-4	2	54
NYA-0X	6	4
NYB-0X	6	5
NYC-1X	6	4
NYC-2X	6	4
NYC-5X	6	5
NZE-0K	7	10
NZE-2K	7	10
NZJ-0K	7	9
NZJ-1K	7	9
NZJ-2K	7	9
NZJ-3K	7	9
NZJ-4K	7	9
NZJ-5K	7	9
NZJ-6K	7	9
NZJ-7K	7	9
NZJ-8K	7	9
NZJ-9K	7	9
NZM-0K	7	9
NZM-1K	7	9
NZM-2K	7	9
NZM-3K	7	9
NZM-4K	7	9
NZM-5K	7	9
NZM-6K	7	9
NZM-7K	7	9
NZM-8K	7	9
NZM-9K	7	9

Item no.	Cat. no.	Cat. page
NZN-0K	7	9
NZN-1K	7	9
NZN-2K	7	9
NZN-3K	7	9
NZO-0K	7	10
NZO-1K	7	10
NZO-2K	7	10
NZO-3K	7	10
NZO-4K	7	10
NZO-5K	7	10
NZO-6K	7	10
NZO-7K	7	10
NZO-8K	7	10
NZQ-1	8	2
NZQ-2	8	2
NZQ-3V	8	2
NZQ-4V	8	2
NZQ-5V	8	2
NZQ-7V	8	2
NZQ-8V	8	2
NZQ-9V	8	2
NZR-1K	7	16
NZR-2	8	2
NZR-3	8	2
NZR-4	8	2
NZR-5	8	2
NZR-6	8	2
NZV-0	8	5
NZV-3	8	5
NZV-4	7	13
NZV-5	7	13
NZV-6	7	13
NZY-6X	6	4
NZY-8X	6	5
NZY-9X	6	5
OAT-5	10	16
OAT-6	10	16
OAT-7	10	16
OAT-8	10	16
OAT-9	10	16
OAU-1	10	16
OAU-2	10	16
OBP-3	7	14

Item no.	Cat. no.	Cat. page
OBT-4	7	14
PAF-0	4	52
PAF-1	4	55
PAF-2	4	55
PAF-3	4	55
PAF-4	4	55
PAF-7	4	57
PAF-8	4	57
PAF-9	4	56
PAG-1	4	56
PAG-2	4	56
PAG-3	4	56
PAG-4	4	56
PAG-5	4	57
PAG-6	4	57
PAG-7	4	57
PAG-8	4	57
PAJ-4	4	56
PAJ-5	4	56
TEA-0X	6	2
TEA-1X	6	2
TEA-2X	6	2
TEA-3X	6	2
TEA-4X	6	2
TEA-5X	6	2
TEA-6X	6	2
TEA-7X	6	2
TEA-8X	6	2
TEA-9X	6	2
TEB-0X	6	3
TEB-1X	6	3
TEB-2X	6	3
TEB-3X	6	3
TEB-4X	6	3
TEB-5X	6	3
TEB-6X	6	3
TEB-7X	6	3
TEB-8X	6	3
TEC-0X	6	2
TEC-1X	6	2
TEC-2X	6	2
TEC-3X	6	2
TEC-4X	6	2

Item no.	Cat. no.	Cat. page
TEC-5X	6	2
TEC-6X	6	2
TEC-7X	6	2
TEC-8X	6	2
TEC-9X	6	2
TED-1X	6	3
TED-2X	6	3
TED-3X	6	3
TED-4X	6	3
TED-5X	6	3
TED-6X	6	3
TED-7X	6	3
TED-8X	6	3
TED-9X	6	3
TEE-1X	6	2
TEE-2X	6	2
TEE-3X	6	2
TEE-4X	6	2
TEE-5X	6	2
TEE-6X	6	2
TEE-7X	6	2
TEE-8X	6	2
TEE-9X	6	2
TEF-1X	6	3
TEF-2X	6	3
TEF-3X	6	3
TEF-4X	6	3
TEF-5X	6	3
TEF-6X	6	3
TEF-7X	6	3
TEF-8X	6	3
TEF-9X	6	3
TEG-1X	6	2
TEG-2X	6	2
TEG-3X	6	2
TEG-4X	6	2
TEG-5X	6	2
TEG-6X	6	2
TEG-7X	6	2
TEG-8X	6	2
TEG-9X	6	2
TEH-1X	6	3
TEH-2X	6	3

Item no.	Cat. no.	Cat. page
TEH-3X	6	3
TEH-4X	6	3
TEH-5X	6	3
TEH-6X	6	3
TEH-7X	6	3
TEH-8X	6	3
TEH-9X	6	3
TEI-1X	6	2
TEI-2X	6	2
TEI-3X	6	2
TEI-4X	6	2
TEI-5X	6	2
TEI-6X	6	2
TEI-7X	6	2
TEI-8X	6	2
TEI-9X	6	2
TEJ-1X	6	3
TEJ-2X	6	3
TEJ-3X	6	3
TEJ-4X	6	3
TEJ-5X	6	3
TEJ-6X	6	3
TEJ-7X	6	3
TEJ-8X	6	3
TEJ-9X	6	3
TEK-0X	6	2
TEK-1X	6	2
TEK-2X	6	2
TEK-3X	6	2
TEK-4X	6	2
TEK-5X	6	2
TEK-6X	6	2
TEK-7X	6	2
TEK-8X	6	2
TEK-9X	6	2
TEL-1X	6	3
TEL-2X	6	3
TEL-3X	6	3
TEL-4X	6	3
TEL-5X	6	3
TEL-6X	6	3
TEL-7X	6	3
TEL-8X	6	3

Item no.	Cat. no.	Cat. page
TEL-9X	6	3
TEM-0X	6	2
TEM-1X	6	2
TEM-2X	6	2
TEM-3X	6	2
TEM-4X	6	2
TEM-5X	6	2
TEM-6X	6	2
TEM-7X	6	2
TEM-8X	6	2
TEM-9X	6	2
TEN-1X	6	3
TEN-2X	6	3
TEN-3X	6	3
TEN-4X	6	3
TEN-5X	6	3
TEN-6X	6	3
TEN-7X	6	3
TEN-8X	6	3
TEN-9X	6	3
TEO-1X	6	2
TEO-2X	6	2
TEO-3X	6	2
TEO-4X	6	2
TEO-5X	6	2
TEO-6X	6	2
TEO-7X	6	2
TEO-8X	6	2
TEO-9X	6	2
TEP-1X	6	3
TEP-2X	6	3
TEP-3X	6	3
TEP-4X	6	3
TEP-5X	6	3
TEP-6X	6	3
TEP-7X	6	3
TEP-8X	6	3
TEP-9X	6	3
TEQ-1X	6	2
TEQ-2X	6	2
TEQ-3X	6	2
TEQ-4X	6	2
TEQ-5X	6	2

Item no.	Cat. no.	Cat. page
TEQ-6X	6	2
TEQ-7X	6	2
TEQ-8X	6	2
TEQ-9X	6	2
TER-1X	6	3
TER-2X	6	3
TER-3X	6	3
TER-4X	6	3
TER-5X	6	3
TER-6X	6	3
TER-7X	6	3
TER-8X	6	3
TER-9X	6	3
TES-1X	6	2
TES-2X	6	2
TES-3X	6	2
TES-4X	6	2
TES-5X	6	2
TES-6X	6	2
TES-7X	6	2
TES-8X	6	2
TES-9X	6	2
TET-1X	6	3
TET-2X	6	3
TET-3X	6	3
TET-4X	6	3
TET-5X	6	3
TET-6X	6	3
TET-7X	6	3
TET-8X	6	3
TET-9X	6	3
TGA-0	6	7
TGA-1	6	7
TGA-2	6	7
TGA-3	6	7
TGA-4	6	7
TGA-5	6	7
TGA-6	6	7
TGA-7	6	7
TGA-8	6	7
TGA-9	6	7
TGB-1	6	7
TGB-2	6	7

Item no.	Cat. no.	Cat. page
TGB-3	6	7
TGB-4	6	7
TGB-5	6	7
TGB-6	6	7
TGB-7	6	7
TGB-8	6	7
TGC-0	6	7
TGC-1	6	7
TGC-2	6	7
TGC-3	6	7
TGC-4	6	7
TGC-5	6	7
TGC-6	6	7
TGC-7	6	7
TGC-8	6	7
TGC-9	6	7
TGD-1	6	7
TGD-2	6	7
TGD-3	6	7
TGD-4	6	7
TGD-5	6	7
TGD-6	6	7
TGD-7	6	7
TGD-8	6	7
TGE-1	6	7
TGE-2	6	7
TGE-3	6	7
TGE-4	6	7
TGE-5	6	7
TGE-6	6	7
TGE-7	6	7
TGE-8	6	7
TGE-9	6	7
TGF-1	6	7
TGF-2	6	7
TGF-3	6	7
TGF-4	6	7
TGF-5	6	7
TGF-6	6	7
TGF-7	6	7
TGF-8	6	7
TGG-1	6	7
TGG-2	6	7

Item no.	Cat. no.	Cat. page
TGG-3	6	7
TGG-4	6	7
TGG-5	6	7
TGG-6	6	7
TGG-7	6	7
TGG-8	6	7
TGG-9	6	7
TGH-1	6	7
TGH-2	6	7
TGH-3	6	7
TGH-4	6	7
TGH-5	6	7
TGH-6	6	7
TGH-7	6	7
TGH-8	6	7
TGI-1	6	7
TGI-2	6	7
TGI-3	6	7
TGI-4	6	7
TGI-5	6	7
TGI-6	6	7
TGI-7	6	7
TGI-8	6	7
TGI-9	6	7
TGJ-1	6	7
TGJ-2	6	7
TGJ-3	6	7
TGJ-4	6	7
TGJ-5	6	7
TGJ-6	6	7
TGJ-7	6	7
TGJ-8	6	7
TGK-0	6	7
TGK-1	6	7
TGK-2	6	7
TGK-3	6	7
TGK-4	6	7
TGK-5	6	7
TGK-6	6	7
TGK-7	6	7
TGK-8	6	7
TGK-9	6	7
TGL-1	6	7

Item no.	Cat. no.	Cat. page
TGL-2	6	7
TGL-3	6	7
TGL-4	6	7
TGL-5	6	7
TGL-6	6	7
TGL-7	6	7
TGL-8	6	7
TGM-0	6	7
TGM-1	6	7
TGM-2	6	7
TGM-3	6	7
TGM-4	6	7
TGM-5	6	7
TGM-6	6	7
TGM-7	6	7
TGM-8	6	7
TGM-9	6	7
TGN-1	6	7
TGN-2	6	7
TGN-3	6	7
TGN-4	6	7
TGN-5	6	7
TGN-6	6	7
TGN-7	6	7
TGN-8	6	7
TGO-1	6	7
TGO-2	6	7
TGO-3	6	7
TGO-4	6	7
TGO-5	6	7
TGO-6	6	7
TGO-7	6	7
TGO-8	6	7
TGO-9	6	7
TGP-1	6	7
TGP-2	6	7
TGP-3	6	7
TGP-4	6	7
TGP-5	6	7
TGP-6	6	7
TGP-7	6	7
TGP-8	6	7
TGQ-1	6	7

Item no.	Cat. no.	Cat. page
TGQ-2	6	7
TGQ-3	6	7
TGQ-4	6	7
TGQ-5	6	7
TGQ-6	6	7
TGQ-7	6	7
TGQ-8	6	7
TGQ-9	6	7
TGR-1	6	7
TGR-2	6	7
TGR-3	6	7
TGR-4	6	7
TGR-5	6	7
TGR-6	6	7
TGR-7	6	7
TGR-8	6	7
TGS-1	6	7
TGS-2	6	7
TGS-3	6	7
TGS-4	6	7
TGS-5	6	7
TGS-6	6	7
TGS-7	6	7
TGS-8	6	7
TGS-9	6	7
TGT-1	6	7
TGT-2	6	7
TGT-3	6	7
TGT-4	6	7
TGT-5	6	7
TGT-6	6	7
TGT-7	6	7
TGT-8	6	7
TGW-0	6	8
TGW-1	6	8
TGZ-0	6	6
TGZ-6A	6	6
THA-1	6	8
THA-2	6	8
THA-3	6	8
THA-4	6	8
THA-5	6	8
THA-6	6	8

Item no.	Cat. no.	Cat. page
THA-7	6	8
THA-8	6	8
THB-1	6	8
THB-2	6	8
THB-3	6	8
THB-4	6	8
THB-5	6	8
THB-6	6	8
THB-7	6	8
THB-8	6	8
THC-1	6	8
THC-2	6	8
THC-3	6	8
THC-4	6	8
THC-5	6	8
THC-6	6	8
THC-7	6	8
THC-8	6	8
THD-1	6	8
THD-2	6	8
THD-3	6	8
THD-4	6	8
THD-5	6	8
THD-6	6	8
THD-7	6	8
THD-8	6	8
THE-1	6	8
THE-2	6	8
THE-3	6	8
THE-4	6	8
THE-5	6	8
THE-6	6	8
THE-7	6	8
THE-8	6	8
THF-1	6	8
THF-2	6	8
THF-3	6	8
THF-4	6	8
THF-5	6	8
THF-6	6	8
THF-7	6	8
THF-8	6	8
THK-1	6	8

Item no.	Cat. no.	Cat. page
THK-2	6	8
THK-3	6	8
THK-4	6	8
THK-5	6	8
THK-6	6	8
THK-7	6	8
THK-8	6	8
THL-1	6	8
THL-2	6	8
THL-3	6	8
THL-4	6	8
THL-5	6	8
THL-6	6	8
THL-7	6	8
THL-8	6	8
THM-1	6	8
THM-2	6	8
THM-3	6	8
THM-4	6	8
THM-5	6	8
THM-6	6	8
THM-7	6	8
THM-8	6	8
THN-1	6	8
THN-2	6	8
THN-3	6	8
THN-4	6	8
THN-5	6	8
THN-6	6	8
THN-7	6	8
THN-8	6	8
THO-1	6	8
THO-2	6	8
THO-3	6	8
THO-4	6	8
THO-5	6	8
THO-6	6	8
THO-7	6	8
THO-8	6	8
THP-1	6	8
THP-2	6	8
THP-3	6	8
THP-4	6	8

Item no.	Cat. no.	Cat. page
THP-5	6	8
THP-6	6	8
THP-7	6	8
THP-8	6	8
TIA-1	6	9
TIA-2	6	9
TIA-3	6	9
TIA-4	6	9
TIA-5	6	9
TIA-6	6	9
TIA-7	6	9
TIA-8	6	9
TIB-1	6	9
TIB-2	6	9
TIB-3	6	9
TIB-4	6	9
TIB-5	6	9
TIB-6	6	9
TIC-1	6	9
TIC-2	6	9
TIC-3	6	9
TIC-4	6	9
TIC-5	6	9
TIC-6	6	9
TID-1	6	9
TID-2	6	9
TID-3	6	9
TID-4	6	9
TID-5	6	9
TID-6	6	9
TIE-2	6	9
TIE-3	6	9
TIE-4	6	9
TIE-5	6	9
TIE-6	6	9
TIF-2	6	9
TIF-3	6	9
TIF-4	6	9
TIF-5	6	9
TIF-6	6	9
TIG-3	6	9
TIG-4	6	9
TIG-5	6	9

Item no.	Cat. no.	Cat. page
TIG-6	6	9
TIH-3	6	9
TIH-4	6	9
TIH-5	6	9
TIH-6	6	9
TIJ-3	6	9
TIJ-4	6	9
TIJ-5	6	9
TIJ-6	6	9
TNC-3X	6	4
TNC-5X	6	4
TOC-0	6	16
TOC-0X	6	16
TOC-1	6	16
TOC-1X	6	16
TOC-2	6	16
TOC-2X	6	16
TOC-3	6	16
TOC-3X	6	16
TOC-4	6	16
TOC-4X	6	16
TOC-5	6	16
TOC-5X	6	16
TOC-6	6	16
TOC-6X	6	16
TOF-0	6	16
TOF-0X	6	16
TOF-1	6	16
TOF-1X	6	16
TOF-2	6	16
TOF-2X	6	16
TOF-3	6	16
TOF-3X	6	16
TOF-4	6	16
TOF-4X	6	16
TOF-5	6	16
TOF-5X	6	16
TOF-6	6	16
TOF-6X	6	16
TOG-0	6	16
TOG-0X	6	16
TOG-1	11	8
TOG-1	6	16

Item no.	Cat. no.	Cat. page
TOG-1X	6	16
TOG-2	11	8
TOG-2	6	16
TOG-2X	6	16
TOG-3	11	8
TOG-3	6	16
TOG-3X	6	16
TOG-4	6	16
TOG-4X	6	16
TOG-5	6	16
TOG-5X	6	16
TOG-6	6	16
TOG-6X	6	16
TOG-7	6	16
TOG-7X	6	16
TOG-8	6	16
TOG-8X	6	16
TOH-0	6	16
TOH-0X	6	16
TOH-1	11	8
TOH-1	6	16
TOH-1X	6	16
TOH-2	11	8
TOH-2	6	16
TOH-2X	6	16
TOH-3	11	8
TOH-3	6	16
TOH-3X	6	16
TOH-4	6	16
TOH-4X	6	16
TOH-5	6	16
TOH-5X	6	16
TOH-6	6	16
TOH-6X	6	16
TOI-0	6	16
TOI-0X	6	16
TOI-1	6	16
TOI-1X	6	16
TOI-2	6	16
TOI-2X	6	16
TOI-3	6	16
TOI-3X	6	16
TOI-4	6	16

Item no.	Cat. no.	Cat. page
TOI-4X	6	16
TOI-5	6	16
TOI-5X	6	16
TOI-6	6	16
TOI-6X	6	16
TOJ-0	6	16
TOJ-0X	6	16
TOJ-1	6	16
TOJ-1X	6	16
TOJ-2	6	16
TOJ-2X	6	16
TOJ-3	6	16
TOJ-3X	6	16
TOJ-4	6	16
TOJ-4X	6	16
TOJ-5	6	16
TOJ-5X	6	16
TOJ-6	6	16
TOJ-6X	6	16
TOK-0	6	16
TOK-0X	6	16
TOK-1	6	16
TOK-1X	6	16
TOK-2	6	16
TOK-2X	6	16
TOK-3	6	16
TOK-3X	6	16
TOK-4	6	16
TOK-4X	6	16
TOK-5	6	16
TOK-5X	6	16
TOK-6	6	16
TOK-6X	6	16
TOM-1	10	10
TOM-6	10	10
TOM-7	10	10
TOM-8	10	10
TON-0	6	16
TON-0X	6	16
TON-1	6	16
TON-1X	6	16
TON-2	6	16
TON-2X	6	16

Item no.	Cat. no.	Cat. page
TON-3	6	16
TON-3X	6	16
TON-4	6	16
TON-4X	6	16
TON-5	6	16
TON-5X	6	16
TON-6	6	16
TON-6X	6	16
TOO-3	6	16
TOO-3X	6	16
TOO-4	6	16
TOO-4X	6	16
TOO-5	6	16
TOO-5X	6	16
TOO-8	6	16
TOO-8X	6	16
TOO-9	6	16
TOO-9X	6	16
TOQ-0	10	8
TOQ-1	10	8
TOQ-2	10	8
TOQ-3	10	8
TOQ-4	10	8
TOQ-5	10	8
TOQ-6	10	9
TOQ-6	4	12
TOQ-7	10	9
TOQ-7	4	12
TOQ-8	10	9
TOQ-8	4	12
TOQ-9	10	9
TOQ-9	4	12
TOR-0	10	8
TOR-1	10	8
TOR-2	10	8
TOR-3	10	8
TOR-4	10	8
TOR-5	10	8
TOR-6	10	8
TOR-7	10	8
TOR-8	10	8
TOR-9	10	8
TOV-1	6	15

Item no.	Cat. no.	Cat. page
TOV-2	6	15
TRB-0X	6	5
TRB-5X	6	5
TRB-6X	6	5
TRB-7X	6	5
TRB-8X	6	4
TRB-9X	6	4
TRC-0X	6	4
TRD-1X	6	4
TRD-2X	6	4
TXW-1X	6	14
TXW-2X	6	14
TXW-6X	6	13
TXW-7X	6	13
TXW-8X	6	13
TXW-9X	6	13
TXX-0X	6	13
UBD-0	1	16
UBE-0	1	16
UBF-0	1	16
UCA-1	1	16
UCA-4	1	16
UCA-8	1	16
UCA-9	1	16
VAD-0	8	15
VAD-3	8	15
VAD-4	8	15

Item no.	Cat. no.	Cat. page
VAD-5	8	15
VAD-6	8	15
VOA-0	8	9
VOA-1	8	9
VOA-2	8	9
VOA-3	8	9
VOA-4	8	9
VOA-5	8	9
VOA-6	8	9
VOA-7	8	9
VOA-8	8	9
VOA-9	8	9
VOB-0	8	9
VOB-2	8	7
VOB-3	8	7
VOB-4	8	7
VOB-5	8	7
VOB-6	8	7
VOC-1	8	7
VOC-2	8	7
VOC-3	8	7
VOC-4	8	7
VOC-5	8	7
VOC-6	8	7
VOC-7	8	7
VOE-4	8	7
VOE-5	8	7

Item no.	Cat. no.	Cat. page
VOE-6	8	7
VOE-7	8	7
VOE-8	8	7
VOE-9	8	7
WEU-0	8	9
WEU-1	8	9
WEU-4	8	9
ZAE-6	4	24
ZAE-6	PC	18
ZAF-4	4	24
ZAF-4	PC	18
ZAF-7	4	24
ZAF-7	PC	18
ZAH-5	4	54
ZAK-6	2	31
ZAL-7	4	51
ZAM-3	4	59
ZAM-4	4	59
ZAU-2	4	45
ZAU-3	4	45
ZBZ-0	4	46
ZBZ-3	4	46
ZCD-9	4	52
ZCE-1	4	52
ZDS-6	11	22
ZOC-6	3	8